

MINUTES
GEO. L. SMITH II GEORGIA WORLD CONGRESS CENTER AUTHORITY
BOARD OF GOVERNORS MEETING
AUTHORITY CONFERENCE ROOM
Tuesday, January 27, 2026
12:30 p.m.

The following twelve out of fifteen Board members were in attendance:

Steve Adams	Aaron McWhorter
Omar Ali	Butch Miller
Natasha Bell (by Zoom)	Bill Rice (by Zoom)
Brian Daniel, Chair (Presiding)	Bill Russell
Ben Garrett	Doug Tollett, Vice Chair
Glenn Hicks	Dexter Warrior, Secretary

Chair Brian Daniel called the meeting to order at 12:31 p.m.

A motion to approve the December 9, 2025 Board of Governors meeting minutes was made by Ben Garrett, seconded by Glenn Hicks, and unanimously approved.

AUTHORITY BUSINESS

2025 NOVEMBER AND DECEMBER FINANCIAL UPDATE

Rey Rodriguez presented to the Board on the 2025 November and December Financial Update.

2026 MERCEDES-BENZ STADIUM PREPROPOSED MAINTENANCE PLAN, CAPITAL IMPROVEMENT PLAN, AND SUBMITTED EXPENSE BUDGET REVIEW

Dietmar Exler, Senior Vice President and Chief Operating Officer, presented the team's annual expense budget, capital expenditures, and rolling five year capital expense forecast.

RESOLUTION – TK ELEVATOR CORPORATION AGREEMENT FOR ELEVATOR MODERNIZATION SERVICES

Stacey Church, GWCCA Chief Operating Officer, and Pargen Robertson, GWCCA Chief Legal Officer, presented on a Resolution, a copy of which is attached as Exhibit A, regarding the Agreement with TK Elevator Corporation for Elevator Modernization Services.

A motion to approve the TK Elevator Corporation Agreement Resolution was made by Omar Ali, seconded by Butch Miller, and unanimously approved.

Chair Brian Daniel adjourned the meeting at 1:25 p.m.

RESPECTFULLY SUBMITTED:

APPROVED:

James Pargen Robertson, Jr., Chief Legal Officer

Dexter Warrior, Secretary

EXHIBIT A

TK Elevator Corporation Agreement Resolution follows this page.
(87 pages)

**A RESOLUTION
OF
GEO. L. SMITH II GEORGIA WORLD CONGRESS CENTER AUTHORITY
REGARDING
AGREEMENT FOR ELEVATOR MODERNIZATION SERVICES
WITH TK ELEVATOR CORPORATION**

WHEREAS, the Geo. L. Smith II Georgia World Congress Center Authority (the “Authority”) owns and operates the convention and tradeshow facility known as the Geo. L. Smith II Georgia World Congress Center, Centennial Olympic Park, and other facilities; and

WHEREAS, pursuant to O.C.G.A. § 10-9-4(a), the general purpose of the Authority is to acquire, construct, equip, maintain, and operate the project, including but not limited to the Georgia World Congress Center, Centennial Olympic Park, and other facilities, in whole or in part, directly or under contract with the Department of Economic Development or others, and to engage in such other activities as the Authority deems appropriate to promote trade shows, conventions, and political, musical, educational, entertainment, recreational, athletic, or other events and related tourism within the state so as to promote the use of the project and the use of the industrial, agricultural, educational, historical, cultural, recreational, commercial, and natural resources of the State of Georgia by those using the project or visiting the state or who may use the project or visit this state; and

WHEREAS, pursuant to O.C.G.A. §10-9-4(b)(5), the Authority has the power to acquire, by purchase, gift, lease, or otherwise; to own, hold, improve, and use; and to sell, convey, exchange, transfer, lease, sublease, and dispose of real and personal property of every kind and character, or any interest therein, for its corporate purposes; and

WHEREAS, pursuant to O.C.G.A. §10-9-4(b)(6), the Authority has the power to make all contracts and to execute all instruments necessary or convenient to its purposes; and

WHEREAS, pursuant to O.C.G.A. §10-9-7 the management of the business and affairs of the Authority shall be vested in the Board of Governors, and the Board of Governors shall have the power to make bylaws, rules, and regulations for the operation, management, and maintenance of the Georgia World Congress Center, Centennial Olympic Park, and all other projects and properties of the Authority or as may be under the management and control of the Authority; and

WHEREAS, pursuant to O.C.G.A. § 10-9-15(a), the Authority is required to operate the project so as to ensure its maximum use, and in connection with and incident to the operation of the project the Authority may engage in such activities as it deems appropriate to promote trade shows, conventions, and tourism within the state so as to promote the use of the project and the use of the industrial, agricultural, educational, historical, cultural, recreational, and natural resources of the State of Georgia by those using or visiting the project; and

WHEREAS, pursuant to Section 14 of Article VII of the Authority’s Bylaws, except to the extent such authority is conferred upon the Chief Executive Officer or other officers of the Authority under or pursuant to the Bylaws, no officer or employee of the Authority is authorized to enter into any written or oral agreement binding upon the Authority; and

WHEREAS, pursuant to an award under RFP No. 20260000052, TK ELEVATOR CORPORATION seeks to furnish to the Authority elevator modernization services on a contract basis on terms and conditions agreed upon by the parties; and

WHEREAS, the Authority apprehends that contracting for such services is consistent with the corporate purposes and mission of the Authority and the Authority's sound business practices; and

WHEREAS, pursuant to Section 5 of Article VII of the Authority's Bylaws, the Chief Executive Officer is authorized to execute contracts related to the operation, in the ordinary course of business, of the Project, including contracts for the use of the Authority's facilities, equipment, and services, but subject to the Bylaws and any policies, forms, and schedules as may be adopted or approved by the Board or Chief Executive Officer governing such contracts, and also to sign and execute other contracts in the name of the Authority when authorized to do so by resolution of the Board and to sign and execute contracts in the name of the Authority which are authorized by the Board when no other officer is designated by the Board.

NOW, THEREFORE, BE IT RESOLVED by the Board of Governors of the Geo. L. Smith II Georgia World Congress Center Authority that the Chief Executive Officer is authorized, though not required, to execute and deliver, substantially in the form attached hereto as Exhibit A, but subject to the occurrence or satisfaction of any and all applicable contingencies, terms and conditions, an agreement for elevator modernization services and related equipment and services, but only so long as such agreement complies with applicable law and, in the judgment of the Chief Executive Officer, is consistent with the corporate purposes and mission of the Authority and the Authority's sound business practices.

BE IT FURTHER RESOLVED that the Chief Executive Officer is authorized to take any and all actions, to execute and deliver any and all documents, agreements, certificates and instruments and to take any and all steps deemed by the Chief Executive Officer to be necessary or desirable to consummate the execution of an agreement for such services and to carry out the purpose and intent of the foregoing resolution, and all actions heretofore taken in furtherance thereof are hereby ratified and confirmed in all respects.

ADOPTED this 27th day of January 2026.

Brian Daniel, Chair, Board of Governors
Geo. L. Smith II Georgia World Congress Center Authority

Attest: _____
Alisha King, Assistant Secretary

{Authority Seal}

EXHIBIT A

A form of the Elevator Modernization Services Agreement with TK Elevator Corporation follows this page.
(84 pages)

**AGREEMENT FOR ELEVATOR MODERNIZATION SERVICES BETWEEN
GEO. L. SMITH II GEORGIA WORLD CONGRESS CENTER AUTHORITY
AND
TK ELEVATOR CORPORATION**

THIS AGREEMENT is made and entered into as of the _____ day of _____, 2026, by and between the GEO. L. SMITH II GEORGIA WORLD CONGRESS CENTER AUTHORITY (the “Authority”), and TK ELEVATOR CORPORATION, a Delaware for profit corporation whose address is 3005 Chastain Meadows Pkwy, Suite 100, Marietta, GA 30066, and whose F.E.I. Number is _____ (referred to as "Contractor").

WITNESSETH:

In consideration of the mutual agreements between the parties, the parties agree as follows:

1 ***EQUIPMENT AND SERVICES TO BE PROVIDED BY THE CONTRACTOR.*** Contractor shall provide all engineering, labor, materials, transportation, services, equipment and other goods and services identified in Exhibit “A” and made a part hereof, and such additional equipment and other engineering, labor, materials, transportation, services, equipment and other goods and services as Contractor and Authority may agree in writing, in strict compliance with the terms and conditions of this Agreement. All engineering, labor, materials, transportation, services, equipment and other goods and services provided by Contractor under this Agreement shall comply with the specifications contained herein. Provided, however, that Authority reserves the right unilaterally to modify the engineering, labor, materials, transportation, services, equipment and other goods and services which Contractor is authorized and required to provide under this Agreement and, in the event that Authority so exercises its right unilaterally to so modify engineering, labor, materials, transportation, services, equipment and other goods and services which Contractor is so authorized and required to provide under this Agreement, then the Compensation due

from Authority to Contractor under Article 2 and Exhibit B automatically shall be adjusted to account for that modification.

1.1 **PRODUCT SHIPMENT AND DELIVERY.** All materials, equipment and other goods shall be shipped F.O.B. destination. Destination shall be the Geo. L. Smith II Georgia World Congress Center, 285 Andrew Young International Boulevard, N.W., Atlanta, GA 30313-1591, or such other destination as may be designated in writing by Authority. All materials, equipment and other goods furnished under this Agreement shall be at Contractor's risk until they have been delivered to and accepted by Authority. All materials, equipment and other goods furnished under this Agreement shall be subject to inspection by Authority upon delivery at Authority's discretion. Latent damage and defects shall remain the responsibility of Contractor to remedy at no cost to Authority, regardless of when the latent damage or defects are discovered.

1.2 **NON-EXCLUSIVE RIGHTS.** This Agreement is not exclusive. Authority reserves the right to select other contractors to provide engineering, labor, materials, transportation, services, equipment and other goods and services identical or similar to the engineering, labor, materials, transportation, services, equipment and other goods and services described in this Agreement.

1.3 **PRIORITY OF CONTRACT PROVISIONS.** Any contract terms or conditions included on Contractor's forms and invoices shall be null and void.

2 COMPENSATION.

2.1 For all materials, equipment and other goods furnished and labor, transportation, and other services rendered by Contractor, the Authority shall pay Contractor those sums identified in Exhibit "B" attached hereto, which shall be invoiced by Contractor following completed delivery of the engineering, labor, materials, transportation, services, equipment and other goods and services.

2.2 Contractor shall bill Authority on invoice forms with such additional forms as Authority may require. Contractor shall bill Authority and receive payment only for engineering, labor, materials, transportation, services, equipment and other goods and services authorized in this Agreement and only for engineering, labor, materials, transportation, services, equipment and other goods and services actually provided. Additional Compensation for phone consultation, planning, record keeping, collateral work and travel time is not allowed except as expressly authorized in advance in writing by Authority. Other than payment of the fees expressly identified herein, Authority will not be responsible to reimburse Contractor for any costs which Contractor incurs performing under this Agreement. The Authority shall not be responsible to pay Contractor for any engineering, labor, materials, transportation, services, equipment and other goods and services other than those expressly identified herein.

2.3 Invoices which are complete in accordance with instructions issued by Authority received by Authority within five (5) calendar days after the end of the month shall be processed and paid no later than thirty (30) calendar days after the date invoiced. Those invoices received later shall be processed and paid with the next month's invoices. Incomplete, incorrect, or disputed invoices shall be returned to Contractor for corrective action.

2.4 Contractor shall not charge or otherwise receive compensation from any third party, including any third party incidentally benefiting from or otherwise utilizing Contractor's material, equipment and other goods or services or any other work product under this Agreement. Rather, for material, equipment and other goods and services provided or work product generated under this Agreement Contractor shall receive only the Compensation identified in this Agreement, and nothing else from any source.

2.5 Payment under this Agreement is conditioned upon Contractor's compliance with all the terms of this Agreement. Payment may be deferred until such requirements are satisfied or may be reduced or denied if such requirements are not satisfied.

2.6 If Authority in good faith determines that Contractor has failed to perform or deliver any engineering, labor, materials, transportation, services, equipment and other goods and services as required under this Agreement, then Contractor shall not be entitled to any compensation under this Agreement unless and until such engineering, labor, materials, transportation, services, equipment and other goods and services conform to this Agreement. In the event of such failure, Authority may withhold that portion of Contractor's compensation which represents payment for non-conforming engineering, labor, materials, transportation, services, equipment and other goods and services. To the extent that Contractor's failure causes Authority to incur costs, Authority may deduct the amount of such incurred costs from any amounts otherwise payable to Contractor. Authority's right under this provision to deduct such incurred costs shall not in any way affect Authority's right to terminate this Agreement.

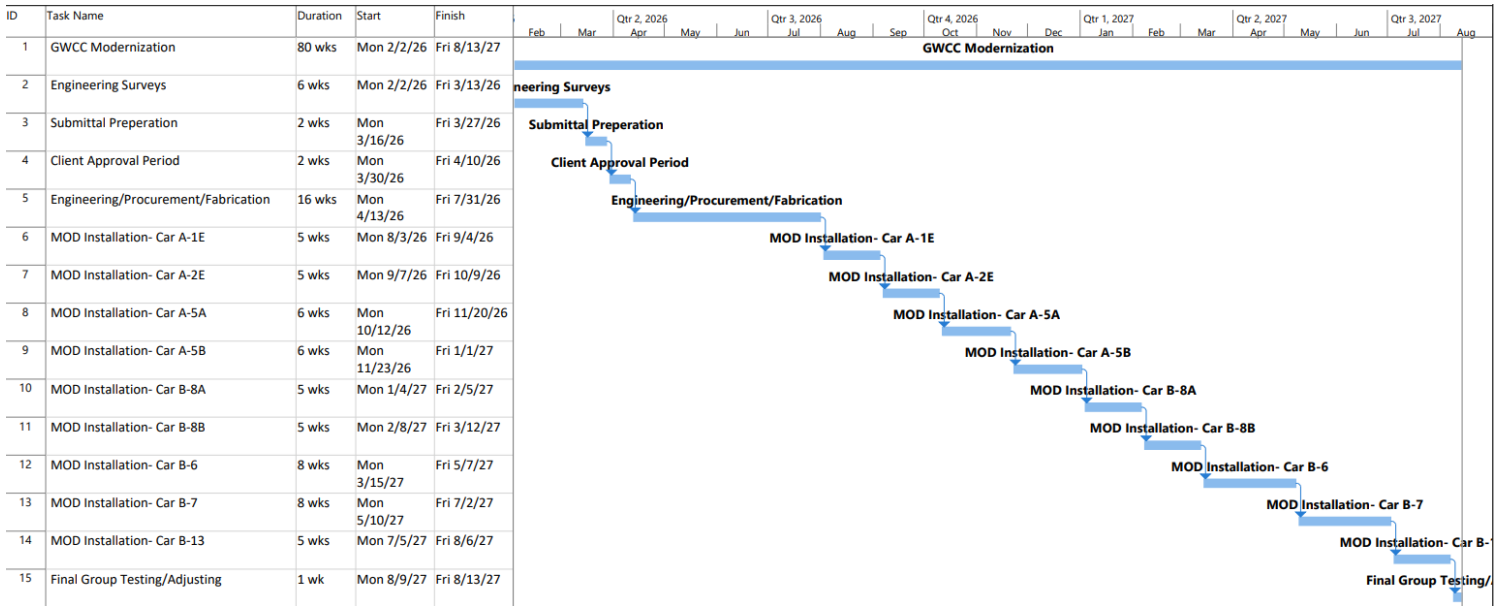
2.7 In the event that Contractor owes to Authority any sums, then Authority may set off the sums owed to Authority by Contractor.

3 **LIMITATION.** The monetary obligation of the Authority under this Agreement is limited to the Compensation identified in Article 2 and Exhibit A, and may not under any circumstances exceed those amounts.

4 **REPRESENTATIVES.** Contractor shall direct all matters regarding this Agreement to:

Erle Coleman
Director of Supply Chain Purchasing
Geo. L. Smith II Georgia World Congress Center Authority
285 Andrew Young International Boulevard
Atlanta, Georgia 30313

5 **CONTRACT PERIOD.** The period of this Agreement shall begin on the date hereof, and shall expire on [REDACTED]. All engineering, labor, materials, transportation, services, equipment and other goods and services and work product are due not later than that date. Time is of the essence.



Shown above is the proposed project schedule pending mutual contract execution of February 2nd, 2026.

6 TERMINATION OF CONTRACT. This Agreement may be terminated by the Authority with or without cause prior to the expiration of its term. If a party breaches the Agreement, the other party shall provide written notice of the breach and a reasonable time under the circumstances to cure the breach, but in no event less than a three (3) days cure period. If the breaching party fails to cure the breach within the specified time period, the non-breaching party may terminate the Agreement upon written notice to the other party. If this Agreement is terminated prior to the expiration of its term, the Authority shall pay the Contractor pro rata only for engineering, labor, materials, transportation, services, equipment and other goods and services already provided pursuant to the terms and conditions of this Agreement.

7 APPLICABLE STANDARDS.

7.1 The Contractor's engineering, labor, materials, transportation, services, equipment and other goods and services under this Agreement shall comply with all applicable laws, ordinances, codes, rules, regulations,

licensure requirements, procedures and standards established by any federal, state or local government instrumentality, and including but not limited to the following:

- 7.1.1 Safety Code for Elevators and Escalators, ASME A17.1
- 7.1.2 Guide for Inspection of Elevators, Escalators, and Moving Walks, ASME A17.2
- 7.1.3 Elevator and Escalator Electrical Equipment, ASME A17.5
- 7.1.4 National Electrical Code, NFPA 70
- 7.1.5 Americans with Disabilities Act, ADA
- 7.1.6 Local Fire Authority
- 7.1.7 Requirements of most stringent provisions of local applicable building code.
- 7.1.8 Life Safety Code, NFPA 101
- 7.1.9 Uniform Federal Accessibility Standard, UFAS

7.2 In addition, Contractor shall comply with such additional standards governing engineering, labor, materials, transportation, services, equipment and other goods and services provided under this Agreement as may be established by the Authority.

8 *NONDISCRIMINATION.*

8.1 Contractor will provide services and projects hereunder without discrimination against any person or persons on account of race, color, creed, religion, sex, sexual orientation, gender identity, marital status, parental status, familial status, national origin, age or disability. The Contractor shall use its best efforts to use minority and female business enterprises (“**M/FBE**”) in business opportunities that relate to the provision of services and projects under this Agreement.

8.2 The Contractor affirmatively certifies as follows:

(i) The Contractor shall not discriminate against any employee, or applicant for employment, because of race, color, creed, religion, sex, sexual orientation, gender identity, marital status, parental status, familial status, national origin, age or disability.

(ii) The Contractor agrees to and shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

(iii) The Contractor shall in all solicitation or advertisement for employees, placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for the employment without regard to race, color, creed, religion, sex, sexual orientation, gender identity, marital status, parental status, familial status, national origin, age or disability.

Contractor is subject to a Collective Bargaining Agreement (CBA) with the International Union of Elevator Constructors. Moreover, pursuant to the National Labor Relations Act, Contractor is obligated to abide by the terms and conditions of the Collective Bargaining Agreement which includes, among other things, the hiring process. As such, to the extent this item is inconsistent with the CBA, the terms and conditions of the CBA will prevail.

9 *LICENSES, STANDARDS AND QUALIFICATIONS.*

9.1 Contractor and each employee and independent contractor assigned by Contractor to this Agreement shall (1) meet applicable statutes and regulations, standards and policies of agencies governing the funding or approval of services provided under this Agreement and (2) shall hold all licenses, registrations, and other permits that are required by this Agreement or by law to be obtained by the Contractor for itself and for or by employees or independent contractors of Contractor engaged in the performance of services under this Agreement necessary for the performance of such services. Copies of such licenses, registrations, and permits shall be made available to the Authority upon request by the Authority.

9.2 Notwithstanding any reference in this Agreement to independent contractors of Contractor performing services under this Agreement, Contractor shall not be authorized to assign to the provision of services under this Agreement any independent contractor without the prior written approval of the Authority, which may be granted or withheld in the Authority's sole and absolute discretion. Contractor shall provide to the Authority written notice of (1) any notice received by Contractor of any investigation, proposed disciplinary or other regulatory actions, or imposition of any disciplinary or other regulatory actions against Contractor in the performance of service under this

Agreement or with respect to services rendered under any professional license or registration or permit held by Contractor; and (2) any claim, regardless of by whom made, of professional error or omission or the violation of this Agreement, with respect to any services under this Agreement; and (3) any information, indictment, or charge of the violation of the criminal laws of the United States or of any State against Contractor.

9.3 Contractor, its employees, subcontractors, and other agents shall comply with all applicable federal, state, and local laws, rules, ordinances, regulations and orders now or hereafter in effect when performing under this Agreement, including without limitation all such laws, rules, ordinances, regulations and orders applicable to the prevention of discrimination in employment and the use of targeted small businesses as subcontractors and contractors. Contractor, its employees, subcontractors and other agents also comply with all applicable federal, state and local laws regarding business permits and licenses that may be required to carry out the work performed under this Agreement. Contractor and Contractor's employees, subcontractors and other agents shall also comply with all State and Authority policies and procedures in effect during Contractor's performance under this Agreement, including but not limited to Authority policies and procedures in respect of personnel conduct, security, safety, confidentiality, and ethics.

10 *INDEPENDENT CONTRACTOR RELATIONSHIP.*

10.1 Contractor is an independent contractor. Contractor is not a partner, joint venturer, agent or servant of the Authority.

10.2 This Agreement shall be binding upon Contractor.

11 *SOLE AGREEMENT.*

11.1 This Agreement constitutes the sole agreement among the parties relating to the subject matter described in this Agreement. No promises or representations, oral or written, not incorporated herein shall be binding upon the parties.

11.2 No modification of this Agreement will be effective unless such modification shall have been made in writing, signed by all parties, and designated as an amendment clearly referring to this document. To the extent that any provisions in Exhibit "A" are inconsistent with the terms and conditions in Articles 1 through 19 of this Agreement, the terms and conditions in Articles 1 through 19 of this Agreement shall control.

12 **GEORGIA LAW GOVERNS.** This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Georgia.

13 **VENUE.** For the purposes of venue, all actions arising out of or in connection with this Agreement, other than those for which a federal court is the court of exclusive original jurisdiction, may be brought in the courts of Fulton County, Georgia, having subject matter jurisdiction.

14 **INSURANCE.** During the term of this Agreement, the Contractor shall procure and maintain the following insurance. Each contract of insurance shall designate the Contractor and the Authority as named insureds on an Owner's and Contractor's Protective Liability Policy; shall provide that the policy will not be cancelled or altered except upon thirty (30) days prior written notice to the Authority; and shall be issued by an insurance company licensed to do business in the State of Georgia in such form as the Authority may approve.

14.1 Comprehensive Commercial General Liability Insurance, with contractual liability coverage, on an occurrence basis with minimum limits of liability of not less than One Million Dollars (\$1,000,000.00) per person, Two Million Dollars (\$2,000,000.00) per occurrence.

14.2 Automobile Liability Insurance with minimum limits of liability of not less than One Million Dollars (\$1,000,000.00) per person, Two Million Dollars (\$2,000,000.00) per occurrence.

14.3 Workers' Compensation Insurance covering all persons employed, directly or indirectly, by Contractor in connection with any work or operations performed by Contractor in the Premises.

14.4 Contractor acknowledges that Contractor is not covered by the Authority's liability insurance program, the Authority's workers' compensation insurance coverage (for Contractor or any of Contractor's employees), any property damage insurance maintained by the Authority for its property, health insurance (for Contractor or any of Contractor's employees), or any other insurance or benefit program for Contractor, its employees, or its property.

15 *INDEMNIFICATION*

15.1 Contractor's Indemnification Obligation. Contractor agrees to indemnify and hold harmless Authority, the State of Georgia, and all of Authority and State of Georgia's officers, employees, agents, and volunteers (collectively, "Indemnified Parties") from any and all costs, expenses, losses, claims, damages, liabilities, settlements and judgments, including reasonable value of the time spent by their respective attorneys, related to or arising from:

(i) Any breach of this Agreement;

(ii) Any negligent, intentional or wrongful act or omission of Contractor or any employee, subcontractor or any other agent utilized or employed by Contractor;

(iii) Any failure of material, equipment, and other goods to comply with applicable specifications, warranties, and certifications under this Agreement;

(iv) The negligence or fault of Contractor in design, testing, development, manufacture, or otherwise with respect to any goods or parts thereof provided under this Agreement;

(v) Claims, demands, or civil actions which, with respect to any goods or parts thereof provided under this Agreement, allege product liability, strict product liability, or any variation thereof;

(vi) Contractor's performance or attempted performance of this Agreement, including any employee, subcontractor, or any other agent utilized or employed by Contractor;

(vii) Any failure by Contractor to comply with the requirements of Section 9.3 of this Agreement;

(viii) Any failure by Contractor to make all reports, payments and withholdings required by federal and state law with respect to social security, employee income and other taxes, fees and costs required by Contractor to conduct business in the State of Georgia and the United States;

(ix) Any infringement of any copyright, trademark, patent, trade dress, or other intellectual property right; or

(x) Any failure by Contractor to adhere to the confidentiality provisions of this Agreement.

15.2 Duty to Reimburse State Tort Claims Fund. To the extent such damage or loss as covered by this Indemnification is covered by the State of Georgia Tort Claims Fund (“the Fund”), Contractor agrees to reimburse the Fund. To the full extent permitted by the Constitution and laws of the State and the terms of the Fund, Contractor, for itself and its insurers, waives any right of subrogation against the State, the Indemnified Parties, and the Fund and insurers participating thereunder.

15.3 Litigation and Settlements. Contractor shall, at its own expense, be entitled to and has a duty to participate in the defense of any suit against the Indemnified Parties. No settlement or compromise of any claim, loss or damage entered into by the Indemnified Parties shall be binding upon Contractor unless approved in writing by Contractor. No settlement or compromise of any claim, loss or damage entered into by Contractor shall be binding upon the Indemnified Parties unless approved in writing by the Indemnified Parties.

16 RESERVED.

17 STATUTORY REPRESENTATION.

Contractor hereby certifies that Contractor is not currently engaged in, and agrees for the duration of this Agreement not to engage in, a boycott of Israel, as defined in O.C.G.A. § 50-5-85.

18 WARRANTIES

18.1 Construction of Warranties Expressed in the Contract with Warranties Implied by Law. All warranties made by Contractor and subcontractors and suppliers of Contractor, whether or not the Agreement specifically denominates Contractor's, suppliers', and subcontractors' promise as a warranty or whether the warranty is created only by Contractor's affirmation or promise, or is created by a description of the materials, equipment or other goods and services to be provided, or by provision of samples to the State of Georgia, shall not be construed as limiting or negating any warranty provided by law, including without limitation all warranties which arise through course of dealing or usage of trade, the warranty of merchantability, and the warranty of fitness for a particular purpose. The warranties expressed in this Agreement are intended to modify the warranties implied by law only to the extent that they expand the warranties applicable to the material, equipment and other goods and services provided by Contractor.

18.2 Warranty – Nonconforming Goods. All material, equipment and goods delivered by Contractor to Authority shall be free from any defects in design, material, and workmanship. If any material, equipment or other goods offered by Contractor are found to be defective in material or workmanship, or do not conform to Contractor's warranty, Authority shall have the option of returning, repairing, or replacing the defective material, equipment or other goods at Contractor's expense. Payment for materials, equipment and other goods shall not constitute acceptance. Acceptance by Authority shall not relieve Contractor of or be deemed to satisfy Contractor's warranty duties or any other obligation under the Contract.

18.3 Compliance with Federal Safety Acts. Contractor warrants and guarantees to Authority that the materials, equipment and any other goods provided under this Agreement are in compliance, as applicable, with Sections 5 and 12 of the Federal Trade Commission Act; the Fair Packaging and Labeling Act; the Federal Food, Drug, and Cosmetic Act; the Consumer Product Safety Act; the Federal Environmental Pesticide Control Act; the Federal Hazardous Substances Act; the Fair Labor Standards Act; the Wool Products Labeling Act; the Flammable

Fabrics Act; the Occupational Safety and Health Act; the Office of Management and Budget A-110 Appendix A; and the Anti-Kickback Act of 1986.

18.4 Originality and Title to Concepts, Materials, and Goods Produced. Contractor represents and warrants that all the concepts, materials, equipment and any other goods and services produced, or provided to Authority pursuant to the terms of this Agreement shall be wholly original with the Contractor or that the Contractor has secured all applicable interests, rights, licenses, permits or other intellectual property rights in such concepts, materials and works. Contractor represents and warrants that the concepts, materials, equipment and other goods and services and Authority's use of same and the exercise by Authority of the rights granted by this Agreement shall not infringe upon any other work, or violate the rights of publicity or privacy of, or constitute a libel or slander against, any person, firm or corporation and that the concepts, materials and works will not infringe upon the copyright, trademark, trade name, trade dress patent, literary, dramatic, statutory, common law or any other rights of any person, firm or corporation or other entity. Contractor represents and warrants that it is the owner of or otherwise has the right to use and distribute the equipment and any other goods and services contemplated by this Agreement.

18.5 Conformity with Contractual Requirements. Contractor represents and warrants that the materials, equipment and any other goods and services provided in accordance with this Agreement will appear and operate in conformance with the terms and conditions of this Agreement.

18.6 Authority to Enter into Agreement. Contractor represents and warrants that it has full authority to enter into this Agreement and that it has not granted and will not grant any right or interest to any person or entity that might derogate, encumber or interfere with the rights granted to the Authority.

18.7 Obligations Owed to Third Parties. Contractor represents and warrants that all obligations owed to third parties with respect to the activities contemplated to be undertaken by Contractor pursuant to the Agreement are or will be fully satisfied by Contractor so that Authority will not have any obligations with respect thereto.

18.8 Title to Property. Contractor represents and warrants that title to any property assigned, conveyed or licensed to Authority is good and that transfer of title or license to Authority is rightful and that all property shall be delivered free of any security interest or other lien or encumbrance.

18.9 Industry Standards. The Contractor represents and expressly warrants that all aspects of the materials, equipment and any other goods and services provided or used by it shall at a minimum conform to the standards in the Contractor's industry. This requirement shall be in addition to any express warranties, representations, and specifications included in the Contract, which shall take precedence.

18.10 Contractor's Personnel and Staffing. Contractor warrants that all persons assigned to perform services under this Agreement are either lawful employees of Contractor or lawful employees of a Subcontractor authorized by Authority as specified in this Agreement. All persons assigned to perform services under this Agreement shall be qualified to perform such services. Personnel assigned by Contractor shall have all professional licenses required to perform the services.

18.11 Use of State Vehicles. Contractor warrants that no Authority vehicles will be used by Contractor for the performance of services under this Agreement. Contractor shall be responsible for providing transportation necessary to perform all services.

18.12 Product Recall. In the event that any of the materials, equipment and other goods are found by Contractor, Authority, any governmental agency, or court having jurisdiction to contain a defect, serious quality or performance deficiency, or otherwise not to be in compliance with any standard or requirement so as to require or make advisable that such equipment or goods be reworked or recalled, Contractor will promptly communicate all relevant facts to Authority and undertake all corrective actions, including those required to meet all obligations imposed by laws, regulations, or orders, and shall file all necessary papers, corrective action programs, and other related documents, provided that nothing contained in this section shall preclude Authority from taking such action

as may be required of it under any such law or regulation. Contractor shall perform all necessary repairs or modifications at its sole expense except to any extent that Contractor and Authority otherwise shall agree.

19 *SEXUAL HARASSMENT PREVENTION*

The Authority promotes respect and dignity and does not tolerate sexual harassment in the workplace. The Authority is committed to providing a workplace and environment free from sexual harassment for its employees and for all persons who interact with state government. All Authority employees are expected and required to interact with all persons including other employees, contractors, and customers in a professional manner that contributes to a respectful work environment free from sexual harassment. Furthermore, the Authority maintains an expectation that its contractors and their employees and subcontractors will interact with entities of the Authority, their customers, and other contractors of the Authority in a professional manner that contributes to a respectful work environment free from sexual harassment.

Pursuant to the State of Georgia’s Statewide Sexual Harassment Prevention Policy (the “Policy”), all contractors who are on Authority premises or who regularly interact with Authority personnel must complete sexual harassment prevention training on an annual basis.

If the Contractor, including its employees and subcontractors, violates the Policy, including but not limited to engaging in sexual harassment and/or retaliation, the Contractor may be subject to appropriate corrective action. Such action may include, but is not limited to, notification to the employer, removal from Authority premises, restricted access to Authority premises and/or personnel, termination of contract, and/or other corrective action(s) deemed necessary by Authority.

If Contractor has employees and subcontractors that are regularly on Authority premises or who will regularly interact with Authority personnel, Contractor certifies that:

- (a) Contractor will ensure that such employees and subcontractors have received, reviewed, and agreed to comply with the State of Georgia’s Statewide Sexual Harassment Prevention Policy located at <http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy>;
- (b) Contractor has provided sexual harassment prevention training in the last year to such employees and subcontractors and will continue to do so on an annual basis; or Contractor will ensure that such employees and subcontractors complete the Georgia Department of Administrative Services’ sexual harassment prevention training located at this direct link <https://www.youtube.com/embed/NjVt0DDnc2s?rel=0> prior to accessing Authority premises and prior to interacting with Authority employees; and on an annual basis thereafter; and
- (c) Upon request of the Authority, Contractor will provide documentation substantiating such employees and subcontractors’ acknowledgment of the State of Georgia’s Statewide Sexual Harassment Prevention Policy and annual completion of sexual harassment prevention training.

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the day and year first above written.

TK ELEVATOR CORPORATION

_____ DATE: _____

BY: _____

ITS: _____

GEO. L. SMITH II GEORGIA WORLD CONGRESS CENTER AUTHORITY

_____ DATE: _____

BY: _____

ITS: _____

EXHIBIT A

SECTION 01 01 00 – SUMMARY OF WORK

PART 1 – GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Modernization of Nine (9) elevators including, but not limited to, the following new systems and components:
 - 1. Hydraulic Power Units
 - 2. Hydraulic Jack Assemblies
 - 3. Operational Controls
 - 4. Dispatching Systems
 - 5. Door Operating Equipment
 - 6. Signal Fixtures
 - 7. Car Interior Finishes
- B. Provide all labor, engineering, tools, transportation, services, supervision, materials, and equipment necessary for and incidental to satisfactory completion of required work as indicated in Contract Documents.
- C. Provide all required staging, hoisting and movement of new equipment, reused equipment, or removal of existing equipment.
- D. Applicable conditions of Owner's General, Special, and Supplemental Conditions.
- E. Prime contracts are defined below, and each is recognized to be a major part of required work to be performed concurrently in close coordination with work of other Contractors.
 - 1. This Contract: Elevator Modernization including associated work included in Section 01 90 00.
- F. Scope of Contract includes, but is not limited to, the following:
 - 1. Coordination, scheduling, and management of work of component suppliers and subcontractors.
 - 2. Furnish and install equipment as specified, utilizing existing and/or modified hoistways and machine rooms.
 - 3. Specific item of required work which cannot be determined to be included in another contract is thereby determined to be included in prime contract.
 - 4. Coordinate installation of LAN cabling in hoistway and machine room. Include all costs in quotation including required time to assist with LAN cable installation. No additional fees will be accepted for coordination and assistance with cable installation by the electrical contractor.

1.2 PRIME CONTRACTOR'S DUTIES

- A. Prime Contractor's duties include the following:
 - 1. Provide and pay for labor, materials and equipment, tools, construction equipment and machinery, and other facilities and services necessary for proper execution and completion of required work.
 - 2. Pay for legally required sales, consumer, and state remodel taxes.
 - 3. Secure and pay for required permits, fees, and licenses necessary for proper execution and completion of required work, as applicable at time of quotation due date.

4. Give required notices.
5. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities applicable to performance of required work.
6. Promptly submit written notice to Consultant of observed variance of Contract Documents from legal requirements.
7. Enforce strict discipline and good order among employees. Do not employ persons unskilled in assigned task.

1.3 WORK SEQUENCE

- A. Construct work in stages.
 1. See Exhibit A "Project Schedule."

1.4 WORKING HOURS

- A. Unless otherwise stated below or elsewhere in the Contract Documents, Contractor shall have access to the building for work activities during the following building operating hours:
 1. Monday-Friday 6am - 6pm
 2. Saturday 6am - 6pm
 3. Sunday 8am - 5pm
- B. Contractor shall perform all work that has the potential to result in any of the following conditions outside of regular building operating hours at no additional cost to the Owner:
 1. More than one elevator out of service in a group of elevators (not including a second car out of service for more than sixty minutes for regular preventive maintenance during non-peak traffic periods).
 2. Interruptions or changes in normal group automatic operation.
 3. Activation of Firefighter's Emergency Operation Phase I.
 4. Activation of Standby Power Operation.
 5. Noise levels more than 80dBA measured in any occupied or public space.
 6. Transport of large equipment through public or tenant spaces.

1.5 CONTRACTOR USE OF PREMISES

- A. Confine operations at site to areas permitted by law, ordinances, permits, Contract Documents, and Owner's specific instructions.
- B. Do not unreasonably encumber site with materials or equipment. Staging area will be located as directed by Owner.
- C. Do not load structure with weight that will endanger structure. Coordinate with Owner.
- D. Assume full responsibility for protection and safekeeping of tools and products stored on or off premises.
- E. Move stored products which interfere with operations of building or the operations of other trades.
- F. Obtain and pay for use of additional storage or work areas needed for operations.

1.6 CONCURRENT MODERNIZATION WORK AND BUILDING OPERATION

- A. This project is a major elevator modernization in an existing building which is open for public business and will continue to operate throughout all phases of required work. It is essential that Contractor give special attention and priority to all matters concerning project safety, protection from dust and loose materials, reduction of noise level, protection from water and air infiltration into building, and maintenance of neat, sightly conditions in and around work areas inside and outside of building. Packaging, scrap materials, and demolition debris shall be promptly removed from building and site daily.
- B. Unless otherwise stated in the Contract Documents, Contractor shall allow only one elevator to be out of service in each elevator group at any time during regular building operating hours.
- C. At all times Contractor shall provide clearly visible warning and directions signs, full height barricades with locking doors, temporary lighting, overhead protection, and hazard-free walking surfaces throughout public area. At all times give special attention to building entrances, exits, and proper safe exiting through work areas as required by law.
 - 1. Barricade design must be approved by client prior to start of modernization work.
 - 2. Standard folding maintenance barricades are not acceptable.
- D. Contractor shall consult Owner and other Contractors to establish and maintain safe temporary routes, including, but not limited to proper barricades, walking surfaces, lighting, fire protection, exiting, warning, and directional signs, and general protection of persons from all hazards in accordance with OSHA Standards due wholly or partially to its operations.

END OF SECTION

SECTION 01 03 00 – ALTERNATES AND ALLOWANCES

PART 1 – GENERAL

- 1.1 ALTERNATES
- 1.2 Provide material and labor required for complete execution of accepted alternates. Include allowance amounts indicated in Contractor's Base Quotation Section 00 31 00. Comply with all provisions of the Contract Documents.
 - A. Alternates:
 - 1. None at this time

END OF SECTION

SECTION 01 04 00 – PROJECT PROCEDURES

PART 1 – GENERAL

1.1 APPLICABLE CODES

- A. Compliance with Regulatory Agencies: Comply with most stringent applicable provisions of following Codes, laws, and/or Authorities, including revisions and changes in effect.

1.2 STAGING AREA

- A. An equipment staging area will be available for use by Contractor. Contractor shall restrict usage to area designated and shall notify Owner/Property Management prior to storing of any large equipment which will impose heavy concentrated loading on floor area. Do not store such equipment until approval is received.

1.3 WORK PHASE

- A. See Section 00 31 00, Quotation Form.

1.4 OCCUPANCY AND WORK BY OTHERS

- A. Contractor expressly affirms Owner's rights to let other contracts and employ other Contractors in connection with required work. Contractor will afford other Contractors and their workmen reasonable opportunity for introduction and storage of materials and equipment, for execution of their work, and will properly connect and coordinate its work with theirs. Contractor will also incorporate comparable provisions in all its subcontracts.
- B. Contractor declares that other Contractors employed by Owner on basis of separate contracts may proceed at such times as necessary to install items of work required by Owner.
- C. Contractor declares that it will cooperate with other Contractors employed by Owner and, in addition to other coordination and expediting efforts, will coordinate their work by written notices regarding necessity of such work to be done on or before certain dates.
- D. Contractor declares that it is responsible for review, stamped, and signed approval of all shop drawings for required work.
- E. Contractor hereby declares that content of foregoing paragraphs and influence they may have on project:
 - 1. Shall not cause a change in stipulated Contract Sum.
 - 2. Shall not cause a change in Construction Time Schedule.

END OF SECTION

SECTION 01 30 00 – SUBMITTALS

PART 1 – GENERAL

1.1 ACTION SUBMITTALS

- A. Within 45 calendar days after award of contract and before beginning equipment fabrication submit field verified existing installation information for review.
1. Hydraulic Car Information:
 2. Power Confirmation Information: Field verified existing conditions at each elevator main disconnect:
 - a) Actual maximum available voltage and current.
 - b) Verify true earth ground value.
 - c) Power Confirmation Information: Design for existing conditions.
 - 1) Motor horsepower and code letter designation.
 - 2) Motor drive starting current, full load running current, and demand factor.
 - 3) Engineered power consumption based on hydraulic elevator with 120 upstarts per hour full load.
 - 4) Written confirmation that existing electrical provisions are adequate for post modernization installation equipment requirements.
 - d) Written confirmation that total planned modernization reactions on building structure do not exceed originally designed reactions by more than 5%. If installation has been altered previously and original car top data tag is missing, confirm that new reactions will not exceed existing reactions. Reaction calculations shall include:
 - 1) Hydraulic Elevators
 - (a) Gross load on jack
 - (b) Total Car Weight
 - (c) Car Capacity
 - e) Product Data, Including:
 - 1) Capacities, sizes, performances, operation, control, signal systems operations, safety features, finishes, and similar information.
 - 2) Product data for car enclosures and hoistway entrances.
 - 3) Product data for signal fixtures, lights, graphics, tactile marking plates, and details of mounting.
 - 4) Full details of ascending car protection means and installation.
 - 5) Two-way conversation devices.
 - 6) Post-modernization machine room heat emissions in BTU.
- B. Shop Drawings:
1. Scaled or Fully Dimensioned Layout: Plan of machine room indicating equipment arrangement, and car/hall signal fixtures.
 2. Fully Dimensioned Fixture Drawings:
 - a) Car operating panels.

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- b) Car floor indicators.
 - c) Hall stations.
 - d) Position indicators.
 - e) Hall lanterns.
 - f) Access key switch.
- C. Samples for Verification:
- 1. For exposed car, hoistway door and frame, and signal equipment finishes.
 - 2. Samples of Sheet Materials: 3" (75 mm) square.
 - 3. Running Trim Members: 4" (100 mm) lengths.
 - 4. Include full component samples, if requested:
 - a) Signal fixtures.
 - b) Lighting.
 - c) Graphics.
 - d) Braille plates.
- D. Written Maintenance Control Program (MCP) specifically designed for the equipment included under this contract.
- 1. Include any unique or product specific procedures or methods required to inspect or test the equipment.
 - 2. Identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests.
- E. Submittal review shall not be construed as an indication that submittal is correct or suitable or that the work represented by submittal complies with the Contract Documents. Compliance with Contract Documents, Code requirements, dimensions, fit, and interface with other work is Contractor's responsibility.
- F. Acknowledge and/or respond to review comments within fourteen calendar days of return.
- 1. Promptly incorporate required changes due to inaccurate data or incomplete definition so that delivery and installation schedules are not affected.
 - 2. Identify and cloud drawing revisions including Contractor elective revisions on each re-submittal.
- G. Contractor's revision response time is not justification for equipment delivery or installation delay.
- 1.2 FINAL CONTRACT DOCUMENTS
- A. See Section 01 70 00, Project Closeout.

END OF SECTION

SECTION 01 60 00 – MATERIAL AND HANDLING

PART 1 – GENERAL

1.1 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

1.2 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. General:
 1. The protection of all equipment and exposed finishes shall be the responsibility of the Contractor during delivery, handling, and installation until completion of project.
 2. The Elevator Contractor shall replace damaged materials with new at no additional cost for material and labor to Owner.
- B. Delivery and Storage:
 1. Manufacturers' original packing must adequately protect materials during delivery.
 2. Deliver materials to the site ready for use in the accepted manufacturer's original and unopened containers and packaging, bearing labels as to type of material, brand name, and manufacturer's name. Delivered materials shall be identical to accepted samples.
 3. Store materials in original protective packaging under cover in a dry and clean location off the ground. Remove delivered materials that are damaged or otherwise not suitable for installation from the job site and replace with acceptable materials.
 4. It is the responsibility of the Contractor to properly store and protect all materials in space provided or designated by the Owner against damage, stains, scratches, corrosion, weather, construction debris, and environmental conditions.

1.3 INSTALLATION REQUIREMENTS

- A. Install all equipment in accordance with Manufacturer's instructions, referenced codes, specifications, and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced codes and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel:
 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 2. Machine room equipment.
 3. Pit equipment.

4. Neatly touch up damaged factory-painted surfaces with original paint color.
5. Protect machine-finish surfaces against corrosion.

1.4 MANUFACTURER'S NAMEPLATES

- A. Manufacturer's name plates and other identifying markings shall not be affixed on surfaces exposed to public view. This requirement does not apply to Underwriter's Laboratories and code required labels.
- B. Each major component of mechanical and electrical equipment shall have identification plate with the Manufacturer's name, address, model number rating, and any other information required by governing codes.

1.5 COLORS OF FACTORY-FINISHED EQUIPMENT

- A. All colors will be selected from the Manufacturer's standard range unless custom colors are specified herein.
- B. Submit samples of all standard colors available and/or specified custom colors for review and approval. See Section 01 30 00, Submittals.
- C. Submit samples of all specified architectural metals specified for review and approval. See Section 01 30 00, Submittals.

1.6 MATERIALS AND FINISHES

- A. Steel:
 1. Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial quality carbon steel, complying with ASTM A366, matte finish.
 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial quality carbon steel, pickled and oiled, complying with ASTM A568/A568M-03.
 3. Structural Steel Shapes and Plates: ASTM A36.
- B. Stainless Steel: Type 302 complying with ASTM A240, with standard tempers and hardness required for fabrication, strength, and durability. Apply mechanical finish on fabricated work in the locations shown or specified, Federal Standard and NAAMM nomenclature, with texture and reflectivity required to match Architect's sample. Protect with adhesive paper covering.
 1. No. 4 Satin: Directional polish finish. Graining directions as shown or, if not shown, in longest dimension.
 2. Textured: 5WL as manufactured by Rigidized Metals or Windsor pattern as manufactured by Rimex Metals or approved equal with .050" mean pattern depth with bright directional polish (satin finish).
 3. Burnished: Non-directional, random abrasion pattern.
- C. Aluminum: Extrusions per ASTM B221; sheet and plate per ASTM B209.
- D. Plastic Laminate: ASTM E84 Class A and NEMA LD3.1, Fire-Rated Grade (GP-50), Type 7, 0.050" \pm .005" thick, color and texture as follows:
 1. Exposed Surfaces: Color and texture selected by Architect.
 2. Concealed Surfaces: Contractor's standard color and finish.

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- E. Fire-Retardant Treated Particle Board Panels: Minimum 3/4" thick backup for natural finished wood and plastic laminate veneered panels, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "1" rating with a flame-spread rating of 25 or less, registered with Local Authorities for elevator finish materials.
 - F. Paint: Clean exposed metal parts and assemblies of oil, grease, scale, and other foreign matter and factory paint one shop coat of standard rust-resistant primer. After erection, provide one finish coat of industrial enamel paint. Galvanized metal need not be painted.
 - G. Prime Finish: Clean all metal surfaces receiving a baked enamel paint finish of oil, grease, and scale. Apply one coat of rust-resistant primer followed by a filler coat over uneven surfaces. Sand smooth and apply final coat of primer.
 - H. Baked Enamel Finish: Prime finish per above. Unless specified "prime finish" only, apply and bake three additional coats of enamel in the selected solid color.
 - I. Entrance Field Paint:
 - 1. Clean all surfaces to remove dirt and grease.
 - 2. Sand and finish surfaces as necessary to remove pits and scratches and prepare surface for painting.
 - 3. Apply filler to ensure smooth surface; sand and apply one coat of electrostatic enamel in the selected solid color.
 - J. Refinishing of natural metals: Remove existing protective finish. Buff as necessary to remove scratches. Regrain or finish as specified and protect as indicated for particular metal type.
 - K. Entrance Support Equipment within Hoistway: Include strut angles, headers, sill support angles, fascia, hanger covers, etc.
 - 1. Clean, remove, and check for corrosive activity. Replace components which exhibit severe deterioration.
 - 2. Tighten all fastenings.
 - L. Glass: Laminated safety glass, minimum 9/16" thick, conforming to ANSI Z97.1 and CPSC 16 CFR Part 1201.

END OF SECTION

SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW

PART 1 – GENERAL

1.1 FINAL CLEANING

- A. See Section 00 80 00, Supplemental Conditions, for contractual requirements governing site cleaning. As a minimum:
 - 1. Elevator hoistways and all equipment therein shall be cleaned and left free of rust, filings, welding slag, rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt, and dust, including walls, building beams, sill ledges, and hoistway divider beams.
 - 2. Care shall be to not to mark, soil, or otherwise deface existing or new surfaces. Clean and restore such surfaces to their original condition.
 - 3. Clean down surfaces and areas which require final painting and finishing work. Cleaning includes removal of rubbish, broom cleaning of floors, removal of any loose plaster or mortar, dust, and other extraneous materials from finish surfaces, and surfaces which will remain visible after the work is complete.
 - 4. Paint machine room walls and floors.
 - 5. Paint elevator pit floor and associated equipment.

1.2 CONSULTANT'S FINAL OBSERVATION AND REVIEW REQUIREMENTS

- A. Review procedure shall apply for individual elevators, portions of groups of elevators, and completed groups of elevators accepted on an interim basis, or elevators and groups of elevators completed, accepted, and placed in operation.
- B. Contractor shall perform review and evaluation of all aspects of its work prior to requesting Consultant's final review. Work shall be considered ready for Consultant's final contract compliance review when all Contractor's tests are complete, all deficiencies noted by the AHJ have been rectified, and all elements of work or a designated portion thereof are in place and elevator or group of elevators are deemed ready for service as intended.
 - 1. Provide 40 hours of accrued run-in time prior to inspection and field reviews.
 - 2. Run-in time must include door open and close cycles, without interfering with usual business activity.
- C. Contractor shall perform review and evaluation of all aspects of its work prior to requesting consultant's review.
- D. Furnish labor, materials, and equipment necessary for Consultant's review. Notify Consultant five working days in advance when ready for final review of elevator or group of elevators.
- E. Consultant's written list of observed deficiencies of materials, equipment, and operating systems will be submitted to Contractor for corrective action. Consultant's review shall include as a minimum:
 - 1. Workmanship and equipment compliance with Contract Documents.
 - 2. Contract speed, capacity, floor-to-floor times, and door performance compliance with Contract Documents.
 - 3. Performance of following is satisfactory:

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- a) Starting, accelerating, running.

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- b) Decelerating, stopping accuracy.
 - c) Door operation and closing force.
 - d) Equipment noise levels.
 - e) Signal fixture utility.
 - f) Overall ride quality.
 - g) Performance of door control devices.
 - h) Operations of emergency two-way communication device.
 - i) Operations of firefighters' service.
 - j) Operations of special security features and floor lock-off provisions.
 - k) Operations of remote monitoring devices.
4. Test Results:
- a) In all test conditions, obtain specified contract speed, performance times, stopping accuracy without re-leveling, and ride quality to satisfaction of Owner and Consultant. Tests will be conducted under both no load and full load condition.
- F. Performance Guarantee: Should Consultant's review identify defects, poor workmanship, variance, or noncompliance with requirements of specified codes and/or ordinances, or variance or noncompliance with the requirements of Contract Documents, Contractor shall complete corrective work in an expedient manner to satisfaction of Owner and Consultant at no cost as follows:
- 1. Replace equipment which does not meet code or Contract Document requirements.
 - 2. Perform work and furnish labor, materials, and equipment necessary to meet specified operation and performance.
 - 3. Perform retesting required by governing code authority, Owner, and Consultant.
- G. A follow-up final contract compliance review shall be performed by Consultant after notification by Contractor that all deficiencies have been corrected. Provide Consultant with copies of the initial deficiency report marked to indicate items which Contractor considers complete.
- 1.3 MANUFACTURER'S WARRANTY
- A. Manufacturer agrees to repair, restore, or replace elevator equipment that fails due to defective materials or poor workmanship within specified warranty period.
 - B. Warranty Period: Twelve (12) months from date of Substantial Completion:
 - C. The Elevator Contractor guarantees that the materials and workmanship of the apparatus installed by them and any subcontractor, under this contract, is first class in every respect and that they will make good on any defects not due to ordinary wear and tear or improper use, which may develop within one year from the date of final acceptance of all equipment.
 - D. Manufacturer's warranty to repair or replace defective products or their components in the event of defects within a specified period.
 - E. Neither the final payment nor any provisions of the contract documents relieve the Elevator Contractor of any obligation provided by law. They shall remedy any defects and pay all expenses for any damage to other work.
 - F. The warranty as outlined above, for all devices, starts from the date of final acceptance of each device, by the Consultant and the Owner, of all work specified and intended under these contract documents.

1.4 OWNER'S INFORMATION

- A. Provide electronic copies (flash drive or Consultant-approved equivalent) of written information necessary for proper maintenance and adjustment of equipment within 30 days following final acceptance. Final retention will be withheld until data is received by Owner and reviewed by Consultant. Include the following as minimums:
1. Straight-line wiring diagrams of "as-installed" elevator circuits with index of location and function of components. Provide one set reproducible master. Mount one set wiring diagrams on panels, racked, or similarly protected, in elevator machine room. Provide remaining set rolled and in a protective drawing tube. Maintain all drawing sets with addition of all subsequent changes. These diagrams are Owner's property.
 2. Written Maintenance Control Program (MCP) specifically designed for the equipment included under this contract. Include any unique or product-specific procedures or methods required to inspect or test the equipment. In addition, identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests.
 3. Lubrication instructions, including recommended grade of lubricants.
 4. Parts catalogs for all replaceable parts, including ordering forms and instructions.
 5. Instructions explaining all operating features, including all apparatus in the car and lobby control panels.
 6. Maintenance Control Program documentation for all equipment.
- B. Provide Owner with the following:
1. Any interface cards required for equipment maintenance, code mandated testing, and troubleshooting.
 2. Four sets of keys for all switches and control features properly tagged and marked.
 3. Diagnostic equipment complete with access codes, adjusters' manuals, and set-up manuals for adjustment, diagnosis, and troubleshooting of elevator system, and performance of routine safety tests.
- C. Preventive Maintenance Contract:
1. None associated with this contract
- D. Acceptance of such records by Owner/Consultant shall not be a waiver of any Contractor deviation from Contract Documents or shop drawings or in any way relieve Contractor from his responsibility to perform work in accordance with Contract Documents.

END OF SECTION

SECTION 01 80 00 – MAINTENANCE

PART 1 – GENERAL

1.1 WARRANTY MAINTENANCE

- A. Provide preventive maintenance and 24-hour emergency callback service for one year commencing on date of final acceptance of all modernized elevators by Owner. Warranty maintenance should expire for one (1) year past acceptance for return to service date. MONTHLY examine, adjust, clean, and lubricate all equipment. Repair or replace defective parts using parts produced by the Contractor of installed equipment. Maintain elevator machine room, hoistway, and pit in clean condition.
- B. Use competent personnel, acceptable to the Owner, supervised and employed by Contractor.
- C. The warranty maintenance period specified in Item 1.2 A. above shall be extended one month for each three-month period in which equipment-related failures average more than .25 per unit per month.
- D. Owner retains the option to delete cost of warranty maintenance from modernization equipment contract and remit twelve equal installments directly to Contractor during period in which maintenance is being performed.
- E. Response time for callbacks is less than 2 hours.

END OF SECTION

SECTION 01 90 00 – RELATED WORK

PART 1 – GENERAL

1.1 RELATED BUILDING WORK INCLUDED IN CONTRACT

A. Architectural and Structural, Hoistway and Hallway:

1. Patch any cracks or penetrations in the hoistway to provide smoke and fire rating required by the AHJ. Provide product and installation process documentation as requested.
2. Remove abandoned conduit and wiring in the elevator hoistways.
3. Patch penetrations and gaps in finished elevator lobbies after installation of new signal fixtures. Match existing wall finishes.
4. Protect open hoistways and entrances during construction per OSHA Regulations.
5. Protect car enclosure, hoistway entrance assemblies, and special metal finishes from damage.
6. Seal fireproofing in machine room to prevent flaking.
7. Professionally sand, fill and paint entrance frames, transoms, and strike jambs at all landings.
8. Professionally sand, fill and paint landing doors and sight guards at all landings.
9. Remove existing finished cab flooring. Install new flooring. Coordinate weight of flooring and sill height.

B. Architectural and Structural, Machine Room:

1. Patch any cracks or penetrations in the machine room walls or ceiling to provide smoke and fire rating required by the AHJ. Provide product and installation process documentation as requested.
2. Self-closing and locking rated access door. Include Signage: “ELEVATOR MACHINE ROOM” and “AUTHORIZED PERSONNEL ONLY.”
3. Pass-Through Machine Room: Where pass-through condition exists provide “NOT AN EXIT” signage on door to adjacent space.
4. Paint walls for improved light reflectivity.
5. Provide Class “ABC” fire extinguisher in each elevator machine room.
6. Remove combustible material from machine room

C. Plumbing and Fire Protection:

1. Fire sprinklers in machine room. Manual shut-off means shall be located outside bounds of machine room.
2. Install and program smoke sensors in elevator lobbies and machine room as required for Phase I firefighters recall operation.
3. Provide heat detector in machine room to activate shunt trip contacts in elevator disconnects.
4. Fire sprinklers in hoistway overhead.
5. Fire sprinklers in pit.
6. Verify that the existing sump pump in the pit is operational. Repair or replace as necessary.
7. Pit Sump or Drain: Indirect waste drain or sump with flush grate and pump. Sump pump/drain capacity minimum 3,000 gallons per hour per elevator.
8. Remove abandoned plumbing from machine room and hoistway

- D. Mechanical:
1. Machine and Controller Rooms/Spaces: Ventilation and heating. Provide heating and air conditioning to maintain temperature range of 55°-90° F, and maximum 80% relative humidity, non-condensing.
- E. Electrical Service, Conductors, and Devices:
1. Machine Room or Control Space Lighting: Guarded LED fixtures to provide minimum 19 footcandles average illumination. Provide toggle switch adjacent to strike side of machine room door. Occupancy sensor is not allowed.
 2. Pit Lighting: Guarded LED fixtures to provide minimum 10 footcandles average illumination.
 3. Hoistway Lighting: Two 4'-0" lamps, LED, guarded luminaires. Locate at every other floor. For groups, one fixture may be provided between each two cars. Provide three-way and four-way switches at top floor adjacent to each entrance and in each pit adjacent to each entrance or pit door.
 4. GFCI convenience outlets in pit.
 5. Non-GFCI convenience outlet in pit for sump pump.
 6. GFCI convenience outlets in machine room or control space.
 7. GFCI convenience outlets in machine space.
 8. Heavy-duty three-phase mainline copper power feeder with code compliant grounding to terminals of each elevator controller in the machine room with protected lockable "open" disconnecting means.
 9. Auxiliary contacts to disable emergency battery lowering.
 10. Three-phase power feeder to each freight elevator power door controller in machine room with protected lockable "open" disconnecting means.
 11. Single-phase copper power feeder to each elevator with individual protected lockable "open" disconnecting means located in machine room for utilization equipment:
 - a) Car lighting and blower.
 - b) Pit sump pump.
 - c) CCTV camera.
 - d) In-car video display.
 12. Emergency telephone line to elevator control panel in elevator machine room.
 13. Automatic Fire Recall System:
 - a) Fire alarm initiating devices in each elevator lobby, for each group of elevators or single elevator.
 - b) Fire alarm initiating devices in each elevator machine room.
 - c) Fire alarm initiating devices at top of hoistway if sprinklered.
 - d) Three Relay Activation Modules for each group of elevators or single elevator. Locate modules within three feet of controller designated by the Elevator Contractor to minimize unsupervised wiring. Program Modules as follows:
 - 1) PRIMARY: Activate when any hallway device, except primary floor, activates.
 - 2) ALTERNATE: Activate when hallway device at primary floor activates.
 - 3) FIRE HAT: Activate when machine room device activates.

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- e) Provide technician from fire alarm contractor for pre-test of system during normal working hours.
 - f) Provide technician from fire alarm contractor for acceptance test of system with AHJ during normal and overtime working hours.
 - g) Remove fire alarm devices from pit where not required.
 - h) Remove fire alarm devices from hoistway overhead where not required.
- 14. Category 6 ethernet connection and junction box in each elevator machine room space to Campus security office
 - 15. Means to automatically disconnect power to affected elevator drive unit and controller prior to activation of machine room fire sprinkler system and/or hoistway fire sprinkler system. Provide heat detectors, shunt trip breaker and all necessary equipment.
 - 16. When sprinklers are provided in the hoistway all electrical equipment, located less than 4'-0" above the pit floor shall be identified for use in wet locations. Exception: Seismic protection devices.
 - 17. Wiring from building CCTV system to elevator controllers and all CCTV equipment.
 - 18. CCTV Cameras, elevator contractor to coordinate and assist with installation of cameras in elevators.
 - 19. Card or Proximity Readers, elevator contractor to coordinate and assist with installation of readers in car operating panels or hall stations.
 - 20. Power for Mechanical Equipment: Provide power for HVAC and/or ventilation equipment where applicable.
 - 21. Remove abandoned electrical equipment from machine room and hoistway.
- F. Elevator Contractor Related Work:
- 1. Pit access stationary ladder for each elevator.
 - 2. Under Car Access: Provide permanent ladder and platform for access to under car equipment as required by code.

END OF SECTION

SECTION - 14 24 01 HYDRAULIC PASSENGER ELEVATOR MODERNIZATION

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes modernization of hydraulic elevators as follows:
 - 1. Six (6) passenger elevator(s), Cars A-1E, A-2E, A-5E, A-5B, B-8A, B-8B

1.2 DEFINITIONS

- A. Technical terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1. or in this section.
- B. See SECTION 00 80 00 – SUPPLEMENTAL CONDITIONS

1.3 WORK INCLUDED

- A. See SECTION 01 01 00 – SUMMARY OF WORK

1.4 RELATED WORK COORDINATION

- A. See SECTION 01 04 00 – PROJECT PROCEDURES and SECTION 01 90 00 – RELATED WORK.

1.5 SOURCE QUALITY CONTROL

- A. Country of Origin: Submit list of all major original equipment manufacturer components identifying origin of each component.

1.6 ACTION AND INFORMATIONAL SUBMITTALS

- A. See SECTION 01 30 00 – SUBMITTALS

1.7 CLOSEOUT SUBMITTALS

- A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW

1.8 PERMITS, TESTS, AND CERTIFICATES

- A. Permits:
 - 1. Secure and pay for all permits required for Work to be performed, including but not limited to:
 - a) Municipal and State permits.
 - b) Device or equipment removal permits.
 - c) Hot works permits.
 - d) Confined space access permits.
 - 2. Post, maintain, and renew all permits in compliance with local governmental requirements.
 - 3. Obtain final close-out of all required permits.
 - 4. Tests and Inspections: Schedule with the AHJ and perform tests required by Governing Authority in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators,

and Moving Walks in the presence of Authorized Representative of the AHJ.

- B. Certificates: Obtain, pay for, and deliver to Purchaser with all temporary and final inspection certificates provided by proper governing authorities.
- C. Violations: Resolve any outstanding violations on record with the AHJ on devices being removed prior to final acceptance by the Purchaser.

1.9 QUALITY ASSURANCE

- A. Compliance with Regulatory Agencies: Comply with most stringent applicable provisions of currently enforced codes, laws, and/or authorities, including revisions and changes in effect including, but not limited to:
 - 1. American Society of Mechanical Engineers:
 - a) ASME A17.1, Safety Code for Elevators, Escalators, and Moving Walks.
 - b) ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks.
 - c) ASME A17.5, Elevator and Escalator Electrical Equipment.
 - d) ASME A17.6, Standard for Elevator Suspension, Compensation, and Governor Systems.
 - e) ASME A17.7, Performance Based Safety Code for Elevators, Escalators, and Moving Walks.
 - 2. National Fire Protection Association (NFPA):
 - a) NFPA 70, National Electric Code.
 - b) NFPA 80, Fire Doors and Windows.
 - c) NFPA 101, Life Safety Code.
 - d) NFPA 13, Installation of Sprinkler Systems.
 - 3. International Building Code (IBC).
 - 4. Accessibility:
 - a) American National Standard Institute (ANSI): A117.1, Accessible and Usable Buildings and Facilities.
 - b) ADAAG, Americans with Disabilities Act Accessibility Guidelines.
- B. Inspections: Provide access to areas where work is being performed for the Consultant at any time throughout the project.

1.10 WARRANTY

- A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW.

1.11 MAINTENANCE

- A. See SECTION 01 80 00 – MAINTENANCE.

1.12 DELIVERY, STORAGE, AND HOISTING

- A. See SECTION 01 60 00 – MATERIAL AND HANDLING.

PART 2 – PRODUCTS

2.1 MANUFACTURERS AND PRODUCTS

- A. Approved Elevator Systems:

1. Approved subject to compliance with the requirements of the contract, provide products by one or more of the following Principal Manufacturers. Where specific product models are referenced below only those specific product models or types are approved.
 - a) Otis
 - b) Schindler
 - c) TK Elevator
 - d) Kone Elevator
 - e) Canton Elevator
- B. Approved Elevator Components: In addition to products manufactured by the Principal Manufacturers specified above, the following Manufacturers are approved for the specific components listed below, subject to the requirements of the contract:
 1. Controllers:
 - a) GAL.
 - b) MCE.
 - c) Elevator Controls.
 2. Passenger Elevator Door Equipment (Operators, Tracks, Hangers, and Closers):
 - a) GAL.
 - b) Wittur.
 3. Elevator Car Enclosures:
 - a) EDI/ECI.
 - b) Elite Cabs.
 - c) Globe Architectural & Metal.
 - d) National.
 - e) Regency Elevator Cabs.
 - f) G & R Elevator
 - g) Fab a Cab
 - h) Snap Cabs
 4. Car and Hall Signal Fixtures:
 - a) Innovation Bruiser
 5. Two-Way Audio Communication Device:
 - a) Janus/Rath
 - b) Wurtec
 6. Two-Way Video/Non-Verbal Communication Devices:
 - a) Janus/Rath
 - b) Wurtec

2.2 MATERIALS

- A. See SECTION 01 60 00 – MATERIAL AND HANDLING

PART 3 – PERFORMANCE AND OPERATION

3.1 PERFORMANCE REQUIREMENTS

- A. Car Speed: Allowable variance from contract speed of no more than +/- 10% in the up direction and +10%/-20% in the down direction.
- B. Car Capacity: Safely lower, stop, and hold rated load.
- C. Car Stopping Zone: $\pm 3/8$ " under any loading condition.
- D. Door Times: Seconds from start to fully open or fully closed:
 - 1. Passenger Cars Door Open: 2.0 seconds. Door Close: 3.8 seconds.
- E. Noise and Vibration Control:
 - 1. Airborne Noise:
 - a) Measured noise level of elevator equipment and its operation shall not exceed 60 dBA inside car under any condition including door operation and car ventilation exhaust blower on its highest speed.
 - b) Limit noise level in the machine room and control space relating to elevator equipment and its operation to no more than 80 dBA.
 - c) All dBA readings to be taken 3'-0" off the floor and 3'-0" from the equipment using the "A" weighted scale.
 - 2. Vibration Control: Mechanically isolate all new elevator equipment from the building structure and other components. Minimize objectionable noise and transmission of vibrations to occupied areas of the building.

3.2 ELEVATOR OPERATION REQUIREMENTS

- A. General:
 - 1. Cars automatically slow down and stop level at floors in response to car and landing calls with stops made in sequence in the established direction of travel, regardless of order in which buttons are pressed.
 - 2. Landing calls are canceled when the assigned car arrives at the landing.
 - 3. Automatic Dispatch Failure: Provide auxiliary dispatch system to automatically dispatch elevators in the event of failure of the primary control system.
 - 4. Hall Call Button Failure: Should failure of hall call button system occur, initiate operation providing predetermined service to all landings; elevators respond normally to car calls.
 - 5. Automatic Leveling:
 - a) When arriving at a floor cars level to within $1/8$ " above or below the landing sill prior to opening doors, without travelling past the landing during leveling
 - b) Maintain leveling accuracy regardless of carload, direction of travel, rope slippage or stretch.
- B. Independent Service:
 - 1. When feature is activated from within the car allow control of car only from buttons and controls inside the car.
 - 2. Close doors by constant pressure on desired destination floor button or door close button.

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- C. Load Weighing:
1. Provide cars with adjustable cable tension monitoring load weighing device.
 2. Devices are to be self-calibrating for the time-dependent effects of compression in any resilient materials in the assemblies, transducers, etc.
 3. Provide dispatching at main floor in advance of normal intervals when car fills to capacity.
 4. Provide hall call by-pass when car is filled to a field adjustable (10%-100%) range of percentage of rated capacity and traveling in down direction.
 5. Activate voice message and visual overload signaling device inside elevator cab activated when load weighing device senses carload has reached or exceeded a pre-determined percentage of capacity.
 6. Elevator does not close doors or run when Overload signaling device is active.
- D. Selective Collective Operation, Single Car:
1. Elevators operate via momentary pressure buttons to:
 - a) Place hall call by selecting direction of travel at each hall landing (up and down buttons at each intermediate landing, single buttons at each terminal landing).
 - b) Place car call by selecting destination floor from inside the car (individual buttons for each floor served).
 2. Hall calls, other than calls placed at the landing at which car is standing, start car, and cause the car to stop at first landing for which a call is registered in the direction of travel.
 3. Stops are made in order in which landings are reached, irrespective of sequence in which calls are registered.
 4. Parked Car (No Demand):
 - a) When feature is enabled elevator remains at landing of last assignment (if no further demand) with doors closed, for a predetermined amount of time (programmable for any amount of time). Upon expiration of time, the elevator returns to the main egress landing with the doors closed.
 - b) If feature is disabled, if no further demand, the elevator remains at landing of last assignment with the doors closed until a hall call is registered.
 5. Car and Hall Lanterns:
 - a) Lanterns provide audio and visual signal upon each stop, regardless of responding to car or hall call.
 - b) Visual signal remains active from commencement of door opening until doors are completely closed.
- E. Car-to-Lobby Operation
1. Activated and deactivated for each elevator or group of elevators:
 - a) Remotely via key switch activation.
 2. Return car nonstop after answering pre-registered car calls, and park with doors open for an adjustable time of 60-90 seconds.
 3. Upon expiration of time period, car automatically reverts to normal operation and closes doors until assigned as next car or until the car is placed on independent service.
 4. Firefighters' Emergency Operation overrides Car-to-Lobby Operation.
- F. Battery Rescue Operation:

1. Upon loss of normal power automatically lower the car to the nearest landing depending on the load in the car.
 2. Upon arrival at the landing, the elevator doors shall open automatically and remain open until regular door time has expired; the elevator shall then be removed from service.
 3. Upon restoration of normal power, the elevator shall automatically resume normal operation.
- G. Firefighters' Emergency Operation: Provide equipment and operation in accordance with applicable code requirements. Replace all Firefighters Emergency Operation key switches that control non-modernized elevators in this building to match modernized elevators when first car in group is returned to service.
- H. Battery Backup Operation for Emergency Lighting, Communication, and Alarm:
1. Car mounted battery unit with solid-state charger to operate alarm bell, car emergency lighting, and voice communication system.
 - a) Car lighting and communication shall be provided with a minimum of 4 hours of operation on back-up power during a loss of normal power, and a minimum of 1 hour of operation for car-mounted alarm, and any remote alarm mounted at the designated floor level.
 - b) Battery to be rechargeable with minimum five-year life expectancy.
 - c) Provide constant pressure test button in service compartment of car operating panel.
 - d) Provide lighting integral with portion of normal car lighting system.
- I. Emergency Car Communication System Operation:
1. Comply with all requirements of ASME A17.1 2019 and IBC 2018 , or later editions if adopted by the AHJ.
 2. Hands-Free Phone System:
 - a) In Car System:
 - 1) Hands-free two-way audio communication system in each elevator car.
 - 2) Automatic dialer to include automatic rollover capability if call is not answered with minimum two numbers.
 - 3) Intercom type systems shall be capable of auto dialing out of the building to any active telephone number selected by Owner if intercom call is not answered.
 - 4) Means to identify building and car for Authorized Personnel and Emergency Personnel on demand.
 - 5) Activated by button in car identified with "PHONE" symbol or by external telephone call.
 - 6) Adjacent light jewel illuminates and flashes when call is acknowledged.
 - b) Authorized Personnel Communication:
 - 1) Communication system allows authorized personnel, via phone or intercom system, inside the building or at an outside location, to establish verbal communications with each elevator individually.
 - 2) Provide car interior display video capability for entrapment assessment.
 - c) Communication for Deaf, Hard of Hearing and Speech Impaired:
 - 1) Means for non-verbal communication between passengers inside the elevator car and Authorized Personnel and Emergency Personnel inside or outside of the building.

- 2) System allows for in car video display of custom or preselected text messages generated by Authorized Personnel or Emergency Personnel.
- 3) Passengers inside the elevator car respond to text messages via “Yes” and “No” buttons that generate a visible indication at the location monitored by the Authorized/Emergency Personnel.
- 4) Provide car interior display video capability for entrapment assessment.

PART 4 – ELEVATOR ALTERATIONS

4.1 Hydraulic passenger Elevators:

ALTERATION SUMMARY		
CARS A-1E, A-2E, A-5A, A-5B, B-8A, B-8B	EXISTING INSTALLATION	MODERNIZED INSTALLATION
Capacity:	3500 lbs.	Retain Existing
Class of Loading:	Class A	Retain Existing
Duty Type:	Passenger	Retain Existing
Contract Speed:	125 fpm	125 fpm
Hydraulic Jack Type:	In Ground	In Ground
Machine Type:	Dry Type Power Unit	Submersible Power Unit
Machine Location:	Adjacent at lowest	Retain Existing
Operation Control:	Two-Button Selective Collective	Two-Button Selective Collective
Floors Served:	A-1E/A-2E: 1, 3, 4 A-5A/A-5B: 1 Front-2 Rear B-8A/B-8B: 1-4	Retain Existing
Total Entrances:	A-1E/A-2E: Three (3) A-5A/A-5B: Two (2) B-8A/B-8B: Four (4)	Retain Existing
Car Entrance Type:	A-1E/A-2E: SSCO front only A-5A/A-5B: SSCO front and rear B-8A/B-8B: SSCO front only	Retain Existing
Hoistway Entrance Type:	Single Speed Center Opening	Retain Existing
Entrance Size:	A-1E/A-2E: 42" x 84" A-5A/A-5B: 36" x 84" B-8A/B-8B: 42" x 85"	Retain Existing
Minimum Clear to Underside of Canopy:	8'-0" High	Retain Existing

4.2 MACHINE ROOM EQUIPMENT

- A. Provide and arrange equipment in existing machine room spaces.
- B. Identification: Permanently identify (painted on or securely attached) machine room equipment with minimum 3" characters corresponding to elevator identification.
 1. Driving machine (Power Unit).

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2. Controller.
 3. Main line disconnect switch.
 4. Elevator hoistway pit equipment.
- C. Hydraulic Machine (Power Unit):
1. New:
 - a) Assembled unit mounted on isolating pads consisting of:
 - 1) Dry or submersible type positive displacement pump and induction motor.
 - (a) Dry type only with motors exceeding 50 hp.
 - 2) Master-type control valves combining:
 - (a) Safety features.
 - (b) Holding, direction, bypass, stopping, manual lowering functions.
 - 3) Shut off valve.
 - 4) Oil reservoir with protected vent opening.
 - 5) Oil level gauge.
 - 6) Outlet strainer.
 - 7) Drip pan.
 - 8) Muffler.
 - b) Oil Cooler:
 - 1) Radiator type with fan and adjustable thermostat to keep the oil tank temperature within the hydraulic control valve manufacturer's recommended operating range.
 - (a) Installation of unit must be coordinated with Owner to allow fan exhaust outside of the elevator machine room.
 - c) Enclose dry type units below oil reservoir with removable sheet steel panels lined with sound-absorbing material for applications with motors exceeding 40 hp.
- D. Motor Starter:
1. Soft start type unit including:
 - a) Integral electronic overload protection.
 - b) Integral bypass.
- E. Muffler:
1. In discharge oil line near pump unit.
 - a) Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.
- F. Piping and Oil:
1. All piping, connections and oil required for the elevator system.
 2. Buried piping shall be secondarily contained with watertight Schedule 80 PVC sleeves between elevator machine room and pit.
 3. A minimum of two sound isolation couplings shall be provided between the pump unit and oil line and the oil line and jack unit.
 4. Provide 2-90° joints to reduce vibration and create wave diffraction.

5. Provide isolated pipe stands or hangers.
- G. Shut-Off Valve:
1. Oil line shut off valve in the machine room or accessible from outside the hoistway.
 2. Second valve in pit adjacent to jack unit.
- H. Battery Rescue System:
1. Auxiliary power source shall be provided via 12-volt D.C. battery units installed in machine room or controller space.
 2. Include solid-state charger and testing means mounted in a common metal container.
 3. Battery to be rechargeable lead acid or nickel cadmium with a ten-year life expectancy.
- I. Controller: UL/CSA labeled.
1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
 2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life, and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.
 3. Microprocessor-Related Hardware:
 - a) Provide built-in noise suppression devices providing a high level of noise immunity on all solid-state hardware and devices.
 - b) Provide power supplies with noise suppression devices.
 - c) Isolate inputs from external devices (such as pushbuttons) with opto-isolation modules.
 - d) Design control circuits with one leg of power supply grounded.
 - e) Safety circuits are not to be affected by accidental grounding of any part of the system.
 - f) System automatically restarts when power is restored.
 - g) System memory is retained in the event of power failure or disturbance.
 - h) Equipment is provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
 4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to studs or terminals.
 5. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.
- J. Auxiliary disconnect: Provide controller or power unit mounted auxiliary, lockable "open," disconnect if mainline disconnect is not in sight of controller and/or machine.

4.3 HOISTWAY AND PIT EQUIPMENT

- A. Provide and arrange equipment in existing hoistway spaces.
- B. Hydraulic Jack Assembly: A-1E/A-2E, B-8A/B-8B
1. Retain. Dress all pistons and repack all cylinders as part of this project
- C. Hydraulic Jack Assembly: A-5A/A-5B

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1. New:
 - a) Single jack in ground application.
 - b) Cylinders:
 - 1) Seamless steel pipe.
 - 2) Design head to receive unit-type packing and provide means to collect oil at cylinder head and return automatically to oil reservoir.
 - 3) Design shall include:
 - (a) Cylinder stabilizer bracketing between guide rails as required.
 - c) Plungers:
 - 1) Polished seamless steel tubing or pipe.
 - 2) If plunger length exceeds 24'-0", provide two or more sections not exceeding 16'-0" in length, or coordinate installation of longer unit at the jobsite.
 - 3) Join sections by internal threaded couplings.
 - 4) Multiple section jack units shall be factory polished while assembled and marked.
 2. Isolate plunger from car frames
- D. Jack Support and Shut-Off Valves:
1. Retain.
 - a) Clean and paint steel pit channels to support jack assembly and transmit loads to building structure.
 - b) Manual shut off valves in oil lines adjacent to jack units in pit.
- E. Guide Rails:
1. Retain:
 - a) Clean rails and brackets.
 - b) Remove rust.
 - c) Repaint non-machined surfaces.
 - d) Check and tighten all rail and bracket fastenings.
- F. Buffers, Car:
1. Retain:
 - a) Remove rust and repaint non-machined surfaces.
- G. Terminal Stopping Devices:
1. New:
 - a) Normal and final devices.
- H. Electrical Wiring and Wiring Connections:
1. Conductors and Connections:
 - a) Copper throughout with individual wires coded and connections on identified studs or terminal blocks.
 - b) Use no splices or similar connections in wiring except at terminal blocks, control compartments, or junction boxes.

2. Conduit:
 - a) Galvanized steel conduit, EMT, or duct.
 - b) Flexible conduit length not to exceed 3'-0".
3. Traveling Cables:
 - a) Provide 12 twisted shielded pairs in addition to wires needed to connect specified items and code required spares.
 - b) Tag spares in machine room.
 - c) Provide cables from controller to car top.
4. Auxiliary Wiring:
 - a) Provide conduit, wiring, connections, and machine room demarcation junction boxes for:
 - 1) Fire alarm initiating devices.
 - 2) Emergency two-way communication system.
 - 3) Paging speaker.
 - 4) Security video camera.
 - 5) Security system and card reader interface terminals and relays.
 - 6) Announcement and/or background music speaker.

4.4 HOISTWAY DOOR OPERATING EQUIPMENT

A. Horizontal Sliding Passenger Entrances:

1. Door Hangers, Hoistway:
 - a) Retain Westinghouse Hangers, Replace Montgomery:
2. Door Tracks, Hoistway:
 - a) New:
 - 1) Bar or formed with smooth roller contact surface.
 - 2) Constructed of cold drawn steel.
3. Hoistway Door Interlocks and Pick-up Roller Assemblies:
 - a) Provide New
4. Hoistway Door Closers:
 - a) New:
 - 1) Spring activated spirator type.
5. Hoistway Door Unlocking Devices:
 - a) New:
 - 1) Include all drilling and ACM containment on existing door panels.
 - 2) Unlocking device including new escutcheon at all floors.
 - (a) Finish to match adjacent door panel surface.
6. Hoistway Access Switches:
 - a) New:
 - 1) Top and bottom floors.

- 2) Mount in wall located within easy reach of entrance to allow safe car top access by one person.
 - 3) Provide switch with faceplate.
- B. Floor Numbers: Stencil paint 4" high floor designations in contrasting color on inside face of hoistway doors or hoistway fascia in location visible from within car.

4.5 HOISTWAY ENTRANCE FRAMES AND DOOR PANELS

- A. Provide and arrange equipment in same location as existing entrances.
- B. Passenger Elevator Entrance Frames:
1. Retain:
 - a) Arabic floor designation/tactile marking plates:
 - b) Car identification plate with Braille:
- C. Horizontal Sliding Hoistway Door Panels:
1. Retain:
 - a) Provide new door gibs with fire tabs at all floors.
 - 1) Minimum two gibs per panel, one at leading edge, and one at trailing edge of each panel.
 - 2) Provide code required door panel retainer mechanism on lower edge of door panel.
- D. Sight Guards:
1. Retain. Repair or replace missing or damaged

4.6 HOISTWAY ENTRANCE SILLS AND SUPPORT

- A. Sill Supports, Hoistway Entrance:
1. Retain:
 - a) Check and tighten all fastenings.
- B. Fascia, Toe Guards, and Hanger Covers:
1. Retain:
 - a) Replace damaged or missing sections.
 - b) Check and tighten all fastenings.
 - c) Paint/Stencil floor number on fascia or hoistway wall all floors visible where car doors are initially opened.
- C. Struts and Headers:
1. Retain:
 - a) Check and tighten all fasteners.

4.7 CAR EQUIPMENT

- A. Frame:
1. Retain:
 - a) Check and tighten all fastenings.

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- b) Adjust as required for plumb and square alignment.
- B. Platform:
- 1. Retain:
 - a) Adjust as necessary for plumb and level alignment.
 - b) Reinforce if required.
 - c) Check and tighten all fastenings.
 - d) Inspect after existing finished flooring is removed. Immediately notify Owner and Consultant if any damage or deterioration requiring repairs is observed.
 - e) Replace isolation pads.
- C. Platform Guard:
- 1. New:
 - a) Extended platform guard with Contractor's standard finish to meet Code requirements.
 - b) Minimum 0.059" (1.5 mm) thick steel, or material of equivalent strength and stiffness.
 - c) Reinforced and braced to front of car platform.
- D. Car Rail Guide Roller or Shoe Assemblies:
- 1. New:
 - a) Three or more 6" spring dampened, sound-deadening rollers per guide assembly.
- E. Top of Car Guardrail:
- 1. New:
 - a) Provide car top railings where fall hazard exceeds 12".
 - b) Install guardrails, necessary hardware, and toe board to meet code requirements.
- F. Car Top Control Station:
- 1. Mount to provide safe access and utilization while standing on car top.
 - 2. Operating device with Up and Down direction buttons, a Run button, an Inspection/Automatic switch and Emergency Stop switch.
 - 3. Operating device provides an audible and visible indicator that fire recall has been initiated.
 - 4. Fix station to the car crosshead or provide portable station provided the extension cord and housing is permanently attached to the car crosshead.
 - 5. The car will be operated by constant pressure on the appropriate directional button and the Run button simultaneously.
 - 6. Normal operating devices will be inoperative while this device is in use.
- G. Car Top Emergency Audible Signal:
- 1. Provide on top of each elevator.
 - 2. Activation of Alarm Button or Emergency Stop switch will cause Emergency Audible Signal.
 - 3. Provide auxiliary power supply to provide 1-hr. power in the event of loss of normal power.
- H. Work Light and Duplex Plug Receptacle:
- 1. Work light on top and bottom of car.

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2. Car top light mounted to provide illumination of all car top equipment.
 3. GFCI protected duplex outlet. One (1) at top and one (1) at bottom of car.
 4. Include on/off switch and lamp guard.
- I. Car Sills – Passenger:
1. Retain:
 - a) Clean full width.
 - b) Check and tighten all fastenings.
- J. Car Door Panels – Passenger:
1. New:
 - a) Fully enclosed 16-gauge steel, sandwich construction without binder angles
 - b) Constructed with interlocking, stiffening ribs.
 - c) Leading edges of center-opening doors equipped with rubber astragals full height of panel.
 - d) Minimum of two gibs per panel, one at leading and one at trailing edge with gibs in the sill g
 - e) Wrap Architectural metal cladding around leading and trailing edge of panel and return a minimum of 1/2" on rear side of leading edge of panel.
 - f) Stainless steel satin finish.
- K. Car Door Hangers – Passenger:
1. New:
 - a) Two-point hanger roller with
 - b) Neoprene roller surface
 - c) Suspension with eccentric upthrust roller adjustment.
- L. Car Door Track – Passenger:
1. New:
 - a) Bar or formed cold-drawn steel.
 - b) Removable steel track with smooth roller contact surface.
- M. Car Door Header – Passenger:
1. Retain:
 - a) Check and tighten all fastenings.
- N. Car Door Closed Detection:
1. SIL rated device to detect closed position of car doors.
 2. Design and operation to comply with ASME A17.1 2019 or later edition.
- O. Car Door Interlock:
1. Mechanical door interlock device to prevent:
 - a) Machine operation or power door opening outside of door zone.
 - b) Manual door opening from inside car outside of door zone.
 2. Design and operation to comply with ASME A17.1 2019 or later edition.

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- P. Car Door/Gate Electrical Contact:
1. New:
 - a) Prohibit car operation unless car door or gate is closed.
- Q. Door Clutch – Passenger:
1. New:
 - a) Heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation.
 - b) Design clutch so car doors can be closed, while hoistway doors remain open.
- R. Restricted Opening Device:
1. New:
 - a) Restrict opening of car doors to Code required limit outside unlocking zone.
 - b) Adjust for smooth and quiet operation with operating noise undetectable from inside any car or outside of the hoistway.
 - c) Plunger type restrictors not acceptable.
 - d) Mechanical angle to prevent door opening is acceptable.
- S. Passenger Door Operator:
1. New:
 - a) High-speed, heavy-duty door linear type operator capable of opening doors at no less than 2.5 fps.
 - b) Accomplish reversal in no more than 2½" of door movement.
 - c) Solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current.
 - d) Maintain consistent, smooth, and quiet car door operation at all floors, regardless of door weight or varying air pressure.
- T. Passenger Door Reopening Device:
1. New:
 - a) Black fully enclosed infrared device with full screen infrared matrix or multiple beams extending vertically along leading edge of each door panel to minimum height of 7'-0" above finished floor.
 - b) Integral device to detect passenger or vehicle approach from elevator lobby.
 - c) Extended housing, lens, and additional beams full height of door panels.
- U. Car Operating Panel:
1. New:
 - a) All Passenger Cars.
 - b) One (1) car operating panel per car.
 - c) Mounted in stationary return panel with separate hinged faceplate.
 - d) Metal box containing operating fixtures mounted behind the car return panel.
 - 1) Vandal resistant.
 - e) Provide Exposed Pushbuttons to Initiate:

- 1) Car call registration.
- 2) Alarm.
- 3) Door open.
- 4) Door close.
- 5) Emergency push-to-call communication.
- f) Pushbuttons:
 - 1) Provide minimum 3/4" diameter raised floor pushbuttons which illuminate to indicate call registration.
 - 2) Brushed stainless buttons with illuminated LED halo.
 - 3) Locate operating controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call button and alarm button.
 - 4) Identify buttons with cast tactile symbols rear mounted.
- g) Locked Firefighters' Emergency Operation Panel:
 - 1) Openable by the same key which operates the Fire Operation switch.
 - 2) Including the following features:
 - (a) Phase II fire access switch.
 - (b) Firefighters' visual indication.
 - (c) Call cancel button.
 - (d) Stop switch, manually operated.
 - (e) Door open button.
 - (f) Door close button.
 - (g) Floors served signage.
- h) Service Compartment:
 - 1) Provide lockable service compartment with recessed flush door.
 - 2) Door material and finish to match car return panel or car operating panel faceplate.
 - 3) Include the following controls in lockable service cabinet with function and operating positions identified by permanent signage or engraved legend:
 - 4) Access switch.
 - (a) Light switch.
 - (b) Three position exhaust blower switch.
 - (c) Independent service switch.
 - (d) Constant pressure test button for battery pack emergency lighting.
 - (e) 120-volt, AC, GFCI protected electrical convenience duplex outlet.
 - (f) Card reader override switch.
 - (g) Switch to select either floor voice annunciation, floor passing tone, or chime.
 - (h) Keyed stop switch.
- i) Provide black paint filled (except as noted), engraved, or approved etched signage as follows with approved size and font:

- 1) Phase II firefighters' operating instructions on inside face of firefighters' compartment door.
- 2) Engrave filled red firefighters' operation on outside face of compartment door.
- 3) Building identification car number on main car operating panel.
- 4) "No Smoking" on main car operating panel.
- 5) Car capacity in pounds on service compartment door.

V. In-Car Card/Proximity Reader Security Provisions, All Cars

W. Provide new State of Georgia elevator operating inspection card holder for each elevator.

4.8 COMMUNICATION

A. Car Communication System:

1. Hands free two-way communication instrument in car:
 - a) Mounted behind car operating panel.
 - b) Button on car operating panel to initiate two-way communication from Car.
 - c) Match car operating panel pushbutton design.
 - d) System includes:
 - (a) Auto dialer.
 - (b) Speaker.
 - (c) Microphone.
 - (d) Adjacent light jewel that illuminates and flashes when call is acknowledged.
 - (e) Call button tactile symbol, engraved signage, and Tactile marking adjacent to button mounted integral with car front return panel.
 - (f) Rechargeable back-up battery and charging system.
 - (g) Wiring and connections between all devices inside the car and the elevator controller.
2. Communication for Deaf, Hard of Hearing and Speech Impaired:
 - a) Device inside car to allow text communication between passengers in the car and Authorized and Emergency Elevator Personnel. System includes:
 - 1) Video screen inside car to display text messages.
 - 2) Separate pushbuttons labeled "yes" and "no".
 - (a) Locate on the same car operating panel as the call button for the hands-free communication device.
 - b) Dedicated emergency communications video camera inside the elevator.
 - 1) Mount to capture view of all passengers in the cab.
 - c) Device is located on the same car operating panel as the phone pushbutton.
 - d) Provide shielded twisted pair wiring to communicate to machine room or equipment space network box.
3. Remote Video Monitoring System:
 - a) Dedicated video camera inside elevator car to allow Authorized Personnel to remotely observe passengers at any location on the car floor.

- b) Includes all wiring, conduit, fiber optic strands, encoders, routers, internet connections, cloud-based services required to allow Authorized Personnel to access video signal.

4.9 CAR ENCLOSURE AND INTERIOR FINISHES *See drawing on page 59 of 79*

- A. Unless specifically identified as "Retain," "Reuse," or "Refurbish," provide new equipment. Contractor may, with Consultant approval, provide new equipment in lieu of refurbishing existing. See Section 00 80 00, Supplemental Conditions.
- B. Car Enclosure (Cab Shell):
 - 1. Retain.
- C. Passenger and Service Car Fronts:
 - 1. Car Front Returns:
 - a) Retain:
 - 1) Check and tighten all fastenings.
 - 2) Modify for installation of new signal and pushbutton fixtures.
 - 3) Reclad existing fronts and returns with #4 stainless steel.
 - 2. Front Transoms:
 - a) Retain:
 - 1) Check and tighten all fastenings.
 - 2) Modify for installation of new signal and pushbutton fixtures.
 - 3) Reclad existing transom with #4 stainless steel
- D. Passenger Car Interior Side and Rear Wall Finishes:
 - 1. New:
 - a) Removable panels faced and edged with Wilson Art Standard laminate as selected by Purchaser.
 - b) Satin stainless steel finish metal reveal strips fastened to enclosure between and above panels.
 - c) Provide 1/2" satin aluminum pad studs and protective pads for each elevator cab.
- E. Cab Wall Base:
 - 1. New:
 - a) #4 Stainless steel L Shaped baseboards with formed edges and concealed ventilation cutouts.
- F. Handrails:
 - 1. New:
 - a) 3/8" X 2" bar handrail stainless steel grab bar with straight ends across rear cab walls.
- G. Lighting:
 - 1. New:
 - a) Six (6) LED fixtures with all required wiring connections and controls.
 - b) Coordinate with emergency lighting requirements.
 - c) Provide emergency lighting integral with portion of normal car lighting system.

- d) Recessed LED down lights with on/off switch in car operating panel. Recess mount fixture flush with inside surface of car top. Provide steel guard on car top over fixture.

H. Suspended Ceiling:

1. New:

- a) Six (6) section satin finish stainless-steel panels with lighting cutouts in each panel.

I. Ventilation:

1. New:

- a) Two-speed type OE exhaust blower.
- b) Mount to car canopy on isolated rubber grommets.
- c) Meet noise requirements specified herein.

J. Car Finish Floor Covering:

1. New:

- a) Install Nora Rubber Flooring, 39.5" Square Tiles. (Product and color to be selected by owner)

4.10 HALL CONTROLS

A. Hall Pushbutton Station Fixtures: Innovation Bruiser

4.11 CAR ARRIVAL AND TRAVEL DIRECTION SIGNALS

A. Car Direction Lantern:

1. New:

- a) Provide at each entrance column to indicate travel direction of arriving car.
- b) Illuminate up or down LED lights and sound tone once for up and twice for down direction prior to car arrival at floor.
- c) Illuminate light until the car doors start to close.
- d) Sound level shall be adjustable from 20-80 dBA measured at 5'-0" in front of hall control station and 3'-0" off floor.
- e) Provide adjustable car door dwell time to comply with ADA requirements relative to hall call notification time.
- f) Car direction lenses shall be arrow shaped with faceplates.
- g) Lenses shall be minimum 2½" in their smallest dimension.

B. Hall Position Indicator:

1. New:

- a) Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 2½" high to indicate floor served and direction of car travel.
- b) Mount integral with hall station at main egress floor.
- c) Provide vandal resistant indicator and light assemblies.

C. Car Position Indicator:

1. New:

- a) Alpha-numeric digital indicator type.

- b) Floor designations and direction arrows a minimum of 2" high to indicate floor served and direction of car travel.
 - c) Vandal resistant fixture and faceplate.
 - d) Locate in car operating panel.
 - e) When a car leaves or passes a floor, illuminate indication representing position of car in hoistway.
 - f) Illuminate proper direction arrow to indicate direction of travel.
- D. Voice Synthesizer:
- 1. Provide electronic device with easily reprogrammable message and voice to announce car direction, floor, emergency exiting instructions, etc.

4.12 SIGNAL FIXTURE FACEPLATE FINISHES

- A. All fixtures
 - 1. Stainless steel, satin finish.
- B. Firefighters' Key Box: Flush-mounted box with lockable hinged cover. Engrave instructions for use on cover per Local Fire Authority requirements.

PART 5 – EXECUTION

5.1 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Inform Owner of any irregularities in writing prior to commencing work.
- C. Do not proceed with installation until work in place conforms to project requirements.

5.2 INSTALLATION

- A. Install all equipment as follows:
 - 1. in accordance with Contractor's instructions, referenced codes, specifications, and approved submittals.
 - 2. with clearances in accordance with referenced codes, and specifications.
 - 3. to be easily maintained and/or removed.
 - 4. to afford maximum accessibility, safety, and continuity of operation.
- B. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
 - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 - 2. Machine room equipment, and pit equipment.
 - 3. Neatly touch up damaged factory-painted surfaces with original paint color.
 - 4. Protect machine-finish surfaces against corrosion.
- C. Paint machine room and pit floors.

5.3 FIELD QUALITY CONTROL

- A. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
- B. Perform complete "Acceptance" level pre-testing as specified in the latest edition of ASME A17.2 "Guide for Inspection of Elevators, Escalators, and Moving Walks" prior to AHJ witnessed acceptance testing. Complete any adjustments, repairs, or replacements necessary to achieve code compliant operation including but not limited to:
 - 1. Car emergency communications. Inform Owner and Consultant of any noted failures of Owner provided and maintained equipment or systems.
 - 2. Car buffers.
 - 3. Phase I and II Firefighters' Emergency Operation. Phase I initiated by smoke sensing devices.
 - 4. Power car door operation including door closing force, reopening device, and restricted opening.
- C. Have Code Authority acceptance inspection performed and complete corrective work.
- D. Provide access to installed equipment and elevator personnel assistance for Consultant's final observation and review requirements.

5.4 ADJUSTMENTS

- A. Static balance car to equalize pressure of guide shoes on guide rails.
- B. Verify that weights of existing or altered cars do not exceed total weights indicated on approved submittals. See Section 01 30 00, Submittals.
- C. Lubricate all equipment in accordance with Contractor's instructions.
- D. Adjust motors, power conversion units, brakes, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

5.5 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials daily.
- B. Elevator hoistways and all equipment therein shall be cleaned and left free of rust, filings, welding slag, rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt, and dust, including walls, building beams, sill ledges, and hoistway divider beams.
- C. Care shall be to not to mark, soil, or otherwise deface existing or new surfaces. Clean and restore such surfaces to their original condition.
- D. Clean down surfaces and areas which require final painting and finishing work. Cleaning includes removal of rubbish, broom cleaning of floors, removal of any loose plaster or mortar, dust, and other extraneous materials from finish surfaces, and surfaces which will remain visible after the work is complete.
- E. Paint machinery room floors
- F. Remove all loose materials and filings resulting from work.
- G. Clean machine room equipment and floor.

H. Clean car, car enclosure, entrances, operating and signal fixtures.

5.6 FINAL COMPLIANCE REVIEW

A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW.

END OF SECTION

3/8" x 1/2" Satin Stainless Steel
Bar Handrail, with Straight Ends

New Rubber Flooring

39.5" Square Tiles (Polished
& Glisten to be Selected)

Clad Existing Front
Recess and Transition with
#4 Satin Stainless Steel

Suspended Ceiling
Faced with #4 Satin
Stainless Steel on
1/2" Fire Rated Flake

1/8" Score Lines
Painted Flat Black

Man-It-Tac® Warm White
& White Led Downlights,
with Black Trim Piece

Removable
Access Panel

Butt Joint

Grain
Direction

PLAN VIEW

REFLECTED CEILING PLAN

Suspended Ceiling
Faced with #4 Satin
Stainless Steel

1/2" Satin Aluminum
Purl Studs, One Set
of Protection Pads

(Color to be Selected)

2" Typical

Panels, Faced and
Edged with #4 Satin
Stainless Steel
(Color to be Selected)

on 1/2" Fire Rated Flake

#4 Satin Stainless
Steel Reveals, Typical

Grain
Direction

Suspended Ceiling
Faced with #4 Satin
Stainless Steel

1/2" Satin Aluminum
Purl Studs, One Set
of Protection Pads

(Color to be Selected)

2" Typical

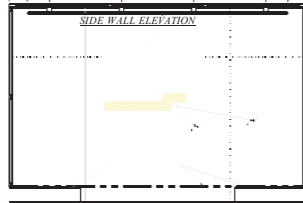
Panels, Faced and
Edged with #4 Satin
Stainless Steel
(Color to be Selected)

on 1/2" Fire Rated Flake

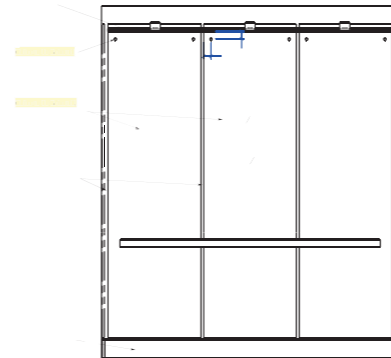
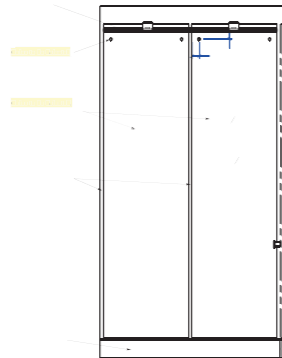
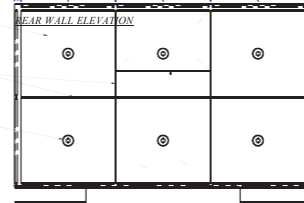
#4 Satin Stainless
Steel Reveals, Typical

Grain
Direction

#4 Sain Stainless Steel
12" Shaped Reinforced
with Formed Edges



#4 Sain Stainless Steel
12" Shaped Reinforced
with Formed Edges



NOTES:

1. Architectural metal to run the longest grain direction.
2. Grain to run the longest direction of the material.
3. Lower vents will be accommodated behind the wall panels within the first 12" above the floor to meet ASME 2014.2c code requirements.

4. Handrails (Non-Mandatory) must to be mounted 32"-34" AFF to meet ASME A17.1-2007/CSA B44-07 requirements for persons with disabilities.

SECTION - 14 22 03 HYDRAULIC FREIGHT ELEVATOR MODERNIZATION

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes modernization of hydraulic elevators as follows:
 - 1. Three (3) freight elevator(s), Cars B-6, B-7 and B-13

1.2 DEFINITIONS

- A. Technical terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1. or in this section.
- B. See SECTION 00 80 00 – SUPPLEMENTAL CONDITIONS

1.3 WORK INCLUDED

- A. See SECTION 01 01 00 – SUMMARY OF WORK

1.4 RELATED WORK COORDINATION

- A. See SECTION 01 04 00 – PROJECT PROCEDURES and SECTION 01 90 00 – RELATED WORK.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- A. See SECTION 01 30 00 – SUBMITTALS

1.6 CLOSEOUT SUBMITTALS

- A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW

1.7 PERMITS, TESTS, AND CERTIFICATES

- A. Permits:
 - 1. Secure and pay for all permits required for Work to be performed, including but not limited to:
 - a) Municipal and State permits.
 - b) Device or equipment removal permits.
 - c) Hot works permits.
 - d) Confined space access permits.
 - 2. Post, maintain, and renew all permits in compliance with local governmental requirements.
 - 3. Obtain final close-out of all required permits.
 - 4. Tests and Inspections: Schedule with the AHJ and perform tests required by Governing Authority in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks in the presence of Authorized Representative of the AHJ.
- B. Certificates: Obtain, pay for, and deliver to Purchaser with all temporary and final inspection certificates provided by proper governing authorities.
- C. Violations: Resolve any outstanding violations on record with the AHJ on devices being removed prior to final acceptance by the Purchaser.

1.8 QUALITY ASSURANCE

- A. Compliance with Regulatory Agencies: Comply with most stringent applicable provisions of currently enforced codes, laws, and/or authorities, including revisions and changes in effect including, but not limited to:
1. American Society of Mechanical Engineers:
 - a) ASME A17.1, Safety Code for Elevators, Escalators, and Moving Walks.
 - b) ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks.
 - c) ASME A17.5, Elevator and Escalator Electrical Equipment.
 - d) ASME A17.6, Standard for Elevator Suspension, Compensation, and Governor Systems.
 - e) ASME A17.7, Performance Based Safety Code for Elevators, Escalators, and Moving Walks.
 2. National Fire Protection Association (NFPA):
 - a) NFPA 70, National Electric Code.
 - b) NFPA 80, Fire Doors and Windows.
 - c) NFPA 101, Life Safety Code.
 - d) NFPA 13, Installation of Sprinkler Systems.
 3. International Building Code (IBC).
 4. Accessibility:
 - a) American National Standard Institute (ANSI): A117.1, Accessible and Usable Buildings and Facilities.
 - b) ADAAG, Americans with Disabilities Act Accessibility Guidelines.
- B. Inspections: Provide access to areas where work is being performed for the Consultant at any time throughout the project.

1.9 WARRANTY

- A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW.

1.10 MAINTENANCE

- A. See SECTION 01 80 00 – MAINTENANCE.

1.11 DELIVERY, STORAGE, AND HOISTING

- A. See SECTION 01 60 00 – MATERIAL AND HANDLING.

PART 2 – PRODUCTS

2.1 MANUFACTURERS AND PRODUCTS

- A. Approved Elevator Systems:
1. Approved subject to compliance with the requirements of the contract, provide products by one or more of the following Principal Manufacturers. Where specific product models are referenced below only those specific product models or types are approved.
 - a) Otis

- b) Schindler
 - c) TK Elevator
 - d) Kone Elevator
 - e) Canton Elevator
 - f) MEI – Total Elevator Solutions
- B. Approved Elevator Components: In addition to products manufactured by the Principal Manufacturers specified above, the following Manufacturers are approved for the specific components listed below, subject to the requirements of the contract:
- 1. Controllers:
 - a) GAL.
 - b) MCE.
 - c) Elevator Controls
 - 2. Freight Vertical Bi-Parting Door:
 - a) Courion
 - b) EMS.
 - c) Peelle.
 - 3. Elevator Car Enclosures:
 - a) EDI/ECI.
 - b) Elite Cabs.
 - c) Globe Architectural & Metal.
 - d) National.
 - e) Regency Elevator Cabs.
 - f) G & R Elevator
 - g) Fab a Cab
 - h) Snap Cabs
 - 4. Car and Hall Signal Fixtures:
 - a) Innovation Bruiser.
 - 5. Two-Way Audio Communication Device:
 - a) Janus/Rath
 - b) Wurtec
 - 6. Two-Way Video/Non-Verbal Communication Devices:
 - a) Janus/Rath
 - b) Wurtec
 - 7. Door Edge Detector with Approaching Object Detection:
 - a) CEDES
 - b) Janus

2.2 MATERIALS

- A. See SECTION 01 60 00 – MATERIAL AND HANDLING

PART 3 – OPERATION

A. Noise and Vibration Control:

1. Airborne Noise:
 - a) Measured noise level of elevator equipment and its operation shall not exceed 60 dBA inside car under any condition including door operation and car ventilation exhaust blower on its highest speed.
 - b) Limit noise level in the machine room and control space relating to elevator equipment and its operation to no more than 80 dBA.
 - c) All dBA readings to be taken 3'-0" off the floor and 3'-0" from the equipment using the "A" weighted scale.
2. Vibration Control: Mechanically isolate all new elevator equipment from the building structure and other components. Minimize objectionable noise and transmission of vibrations to occupied areas of the building.

3.2 ELEVATOR OPERATION REQUIREMENTS

A. General:

1. Cars automatically slow down and stop level at floors in response to car and landing calls with stops made in sequence in the established direction of travel, regardless of order in which buttons are pressed.
2. Landing calls are canceled when the assigned car arrives at the landing.
3. Automatic Dispatch Failure: Provide auxiliary dispatch system to automatically dispatch elevators in the event of failure of the primary control system.
4. Hall Call Button Failure: Should failure of hall call button system occur, initiate operation providing predetermined service to all landings; elevators respond normally to car calls.
5. Automatic Leveling:
 - a) When arriving at a floor cars level to within 1/8" above or below the landing sill prior to opening doors, without travelling past the landing during leveling
 - b) Maintain leveling accuracy regardless of carload, direction of travel, rope slippage or stretch.

B. Door Operation:

1. Power-Operated Freight Door and Gate:
 - a) Door operation at landing initiated by operation of elevator call button for that floor.
 - b) Obstruction of door reopening device beams during gate closing immediately stops and re-opens car gate and freight door.
 - c) Door reopening device detects objects:
 - 1) Immediately adjacent to landing and car sides of door.
 - 2) Within path of door.
 - 3) Objects on the floor in the path of the door.
 - 4) Straddling bi-parting door.
 - d) Adjustable timer holds doors open up to 300 seconds.
 - e) Door closing initiated upon:
 - 1) expiration of a timer.

- 2) activation of door close button.
 - 3) activation of a floor button within car.
 - f) Synchronize door and gate operators as follows:
 - 1) Door and gate accelerate and decelerate smoothly.
 - 2) Car gate closes completely before the hoistway doors begin to close.
 - 3) Car gate does not open until hoistway doors are completely open.
 - g) Provide automatic closing of car doors after dwell time expires:
 - 1) A loud audible signal and highly visible signal actuates not less than 5.0 seconds prior to initiation of door sequence.
 - 2) Dwell time is easily adjustable between 20.0 and 300.0 second.
 - 3) Pressing the Door Close button cancels dwell time.
 - 4) Pressing the Door Open button restarts dwell time.
 - 5) Dwell time set at 60.0 seconds.
 - h) Open door and gate automatically when car arrives at a floor.
 - i) Provide passenger sequence operation:
 - 1) After an adjustable time between, 30 to 300 seconds, provide audible and visible warning signal and automatically close door and gate.
 - 2) Provide dual reversing safety device for car gate.
- C. Independent Service:
- 1. When feature is activated from within the car allow control of car only from buttons and controls inside the car.
 - 2. Close doors by constant pressure on desired destination floor button or door close button.
- D. Load Weighing:
- 1. Provide cars with adjustable cable tension monitoring load weighing device.
 - 2. Devices are to be self-calibrating for the time-dependent effects of compression in any resilient materials in the assemblies, transducers, etc.
 - 3. Provide dispatching at main floor in advance of normal intervals when car fills to capacity.
 - 4. Provide hall call by-pass when car is filled to a field adjustable (10%-100%) range of percentage of rated capacity and traveling in down direction.
 - 5. Activate voice message and visual overload signaling device inside elevator cab activated when load weighing device senses carload has reached or exceeded a pre-determined percentage of capacity.
 - 6. Elevator does not close doors or run when Overload signaling device is active.
- E. Single Automatic Operation:
- 1. Operate car without attendant from pushbuttons in car and at each landing. When car is idle, automatically start car, and dispatch it to appropriate floor when call is registered by pressing car or hall pushbutton.
 - 2. Illuminate, "in use" lights in each hall pushbutton station when car is responding to registered car or hall call. Prevent registration of another call until trip is complete including time for passenger transfer and registration of car call if car is responding to a hall call. Extinguish "in use" light to indicate system is available to respond to next call.

- F. Car-to-Lobby Operation:
 - 1. Activated and deactivated for each elevator or group of elevators:
 - a) Remotely via key switch activation.
 - 2. Return car nonstop after answering pre-registered car calls, and park with doors open for an adjustable time of 60-90 seconds.
 - 3. Upon expiration of time period, car automatically reverts to normal operation and closes doors until assigned as next car or until the car is placed on independent service.
 - 4. Firefighters' Emergency Operation overrides Car-to-Lobby Operation.
- G. Battery Rescue Operation:
 - 1. Upon loss of normal power automatically lower the car to the nearest landing depending on the load in the car.
 - 2. Upon arrival at the landing, the elevator doors shall open automatically and remain open until regular door time has expired; the elevator shall then be removed from service.
 - 3. Upon restoration of normal power, the elevator shall automatically resume normal operation.
- H. Firefighters' Emergency Operation: Provide equipment and operation in accordance with applicable code requirements. Replace all Firefighters Emergency Operation key switches that control non-modernized elevators in this building to match modernized elevators when first car in group is returned to service.
- I. Battery Backup Operation for Emergency Lighting, Communication, and Alarm:
 - 1. Car mounted battery unit with solid-state charger to operate alarm bell, car emergency lighting, and voice communication system.
 - a) Car lighting and communication shall be provided with a minimum of 4 hours of operation on back-up power during a loss of normal power, and a minimum of 1 hour of operation for car-mounted alarm, and any remote alarm mounted at the designated floor level.
 - b) Battery to be rechargeable with minimum five-year life expectancy.
 - c) Provide constant pressure test button in service compartment of car operating panel.
 - d) Provide lighting integral with portion of normal car lighting system.
- J. Emergency Car Communication System Operation:
 - 1. Comply with all requirements of ASME A17.1 2019 and IBC 2018 , or later editions if adopted by the AHJ.
 - 2. Hands-Free Phone System:
 - a) In Car System:
 - 1) Hands-free two-way audio communication system in each elevator car.
 - 2) Automatic dialer to include automatic rollover capability if call is not answered with minimum two numbers.
 - 3) Intercom type systems shall be capable of auto dialing out of the building to any active telephone number selected by Owner if intercom call is not answered.
 - 4) Means to identify building and car for Authorized Personnel and Emergency Personnel on demand.
 - 5) Activated by button in car identified with "PHONE" symbol or by external telephone call.
 - 6) Adjacent light jewel illuminates and flashes when call is acknowledged.

- b) Authorized Personnel Communication:
 - 1) Communication system allows authorized personnel, via phone or intercom system, inside the building or at an outside location, to establish verbal communications with each elevator individually.
 - 2) Provide car interior display video capability for entrapment assessment.
- c) Communication for Deaf, Hard of Hearing and Speech Impaired:

PART 4 – ELEVATOR ALTERATIONS

4.1 Hydraulic Freight Elevators:

ALTERATION SUMMARY		
CARS B6, B7, B13	EXISTING INSTALLATION	MODERNIZED INSTALLATION
Capacity:	10000 lbs.	10000 lbs.
Class of Loading:	Class A	Class A
Duty Type:	Freight	Freight
Contract Speed:	100 fpm	100 fpm
Hydraulic Jack Type:	In Ground	In Ground
Machine Type:	Dry Type Power Unit	Dry Type Power Unit
Machine Location:	Adjacent at floor 1	Retain Existing
Operation Control:	Single Automatic	Single Automatic
Floors Served:	B-6: 1-4 B-7: 1-4 B-13: 1-2	Retain Existing
Total Entrances:	B-6: Four (4) front and three (3) rear B-7: Four (4) front and three (3) rear B-13: Two (2) front	Retain Existing
Car Entrance Type:	Gate	Gate
Hoistway Entrance Type:	Bi parting	Retain Existing
Entrance Size:	10'-0" Wide x 8'-0" High	Retain Existing
Minimum Clear to Underside of Canopy:	10'-0" High	Retain Existing

4.2 MACHINE ROOM EQUIPMENT

- A. Provide and arrange equipment in existing machine room spaces.
- B. Identification: Permanently identify (painted on or securely attached) machine room equipment with minimum 3" characters corresponding to elevator identification.
 - 1. Driving machine (Power Unit).
 - 2. Controller.
 - 3. Main line disconnect switch.
 - 4. Elevator hoistway pit equipment.

C. Hydraulic Machine (Power Unit):

1. New:

- a) Assembled unit mounted on isolating pads consisting of:
 - 1) Dry type positive displacement pump and induction motor.
 - 2) Master-type control valves combining:
 - (a) Safety features.
 - (b) Holding, direction, bypass, stopping, manual lowering functions.
 - 3) Shut off valve.
 - 4) Oil reservoir with protected vent opening.
 - 5) Oil level gauge.
 - 6) Outlet strainer.
 - 7) Drip pan.
 - 8) Muffler.
- b) Oil Cooler:
 - 1) Radiator type with fan and adjustable thermostat to keep the oil tank temperature within the hydraulic control valve manufacturer's recommended operating range.
 - (a) Installation of unit must be coordinated with Owner to allow fan exhaust outside of the elevator machine room.
- c) Enclose dry type units below oil reservoir with removable sheet steel panels lined with sound-absorbing material for applications with motors exceeding 40 hp.

D. Motor Starter:

- 1. Soft start type unit including:
 - a) Integral electronic overload protection.
 - b) Integral bypass.

E. Muffler:

- 1. In discharge oil line near pump unit.
 - a) Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.

F. Piping and Oil:

- 1. All piping, connections and oil required for the elevator system.
- 2. Buried piping shall be secondarily contained with watertight Schedule 80 PVC sleeves between elevator machine room and pit.
- 3. A minimum of two sound isolation couplings shall be provided between the pump unit and oil line and the oil line and jack unit.
- 4. Provide 2-90° joints to reduce vibration and create wave diffraction.
- 5. Provide isolated pipe stands or hangers.

G. Shut-Off Valve:

- 1. Oil line shut off valve in the machine room or accessible from outside the hoistway.
- 2. Second valve in pit adjacent to jack unit.

H. Battery Rescue System:

1. Auxiliary power source shall be provided via 12-volt D.C. battery units installed in machine room or controller space.
2. Include solid-state charger and testing means mounted in a common metal container.
3. Battery to be rechargeable lead acid or nickel cadmium with a ten-year life expectancy.

I. Controller: UL/CSA labeled.

1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life, and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.
3. Microprocessor-Related Hardware:
 - a) Provide built-in noise suppression devices providing a high level of noise immunity on all solid-state hardware and devices.
 - b) Provide power supplies with noise suppression devices.
 - c) Isolate inputs from external devices (such as pushbuttons) with opto-isolation modules.
 - d) Design control circuits with one leg of power supply grounded.
 - e) Safety circuits are not to be affected by accidental grounding of any part of the system.
 - f) System automatically restarts when power is restored.
 - g) System memory is retained in the event of power failure or disturbance.
 - h) Equipment is provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to studs or terminals.
5. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.

J. Auxiliary disconnect: Provide controller or power unit mounted auxiliary, lockable "open," disconnect if mainline disconnect is not in sight of controller and/or machine.

4.3 HOISTWAY AND PIT EQUIPMENT

A. Provide and arrange equipment in existing hoistway spaces.

B. Hydraulic Jack Assembly:

1. Retain.
 - a) Repack piston as part of the modernization

C. Jack Support and Shut-Off Valves:

1. Retain. Clean and paint pit equipment

D. Guide Rails:

1. Retain:

- a) Clean rails and brackets.
 - b) Remove rust.
 - c) Repaint non-machined surfaces.
 - d) Check and tighten all rail and bracket fastenings.
- E. Buffers, Car:
- 1. Retain:
 - a) Remove rust and repaint non-machined surfaces.
- F. Terminal Stopping Devices:
- 1. New:
 - a) Normal and final devices.
- G. Electrical Wiring and Wiring Connections:
- 1. Conductors and Connections:
 - a) Copper throughout with individual wires coded and connections on identified studs or terminal blocks.
 - b) Use no splices or similar connections in wiring except at terminal blocks, control compartments, or junction boxes.
 - 2. Conduit:
 - a) Galvanized steel conduit, EMT, or duct.
 - b) Flexible conduit length not to exceed 3'-0".
 - 3. Traveling Cables:
 - a) Provide 12 twisted shielded pairs in addition to wires needed to connect specified items and code required spares.
 - b) Tag spares in machine room.
 - c) Provide cables from controller to car top.
 - 4. Auxiliary Wiring:
 - a) Provide conduit, wiring, connections, and machine room demarcation junction boxes for:
 - 1) Fire alarm initiating devices.
 - 2) Emergency two-way communication system.
 - 3) Security video camera.

4.4 HOISTWAY DOOR OPERATING EQUIPMENT

- A. Freight Bi-Parting Hoistway Entrance Equipment:
- 1. Door Guide Tracks:
 - a) New:
 - 1) Continuous steel angles or formed steel tracks.
 - 2) Securely fastened to hoistway entrance frame.
 - 2. Door Guide Shoes:
 - a) New:

- 1) Machined iron shoes.
 - 2) Four (4) shoes per door panel with not less than 2 ½" lateral contact with track per shoe.
3. Door Interlocks:
- a) New:
 - 1) Operable without retiring cam.
4. Hoistway Freight Door Unlocking Device:
- a) New:
 - 1) Unlocking device with pull chain under hinged, lockable cover.
 - 2) Stainless steel No. 4 cover finish at all floors.
5. Power Freight Door Operators:
- a) New:
 - 1) Power door operator for each entrance.
 - 2) Provide means to open doors from inside of car in the event of power failure.
 - 3) Closing speed minimum of 0.8 fps; maximum of 1.0 fps.
- B. Floor Numbers: Stencil paint 4" high floor designations in contrasting color on inside face of hoistway doors or hoistway fascia in location visible from within car.

4.5 HOISTWAY ENTRANCE FRAMES AND DOOR PANELS

- A. Provide and arrange equipment in same location as existing entrances.
- B. Vertical Bi-Parting Door Panels and Frames:
1. Retain:
 - a) Clean, fill in and paint door panels and frames with color as selected by the Owner

4.6 CAR EQUIPMENT

- A. Frame:
1. Retain:
 - a) Check and tighten all fastenings.
 - b) Adjust as required for plumb and square alignment.
- B. Platform:
1. Retain:
 - a) Adjust as necessary for plumb and level alignment.
 - b) Reinforce if required.
 - c) Check and tighten all fastenings.
 - d) Inspect after existing finished flooring is removed. Immediately notify Owner and Consultant if any damage or deterioration requiring repairs is observed.
 - e) Replace isolation pads.
- C. Platform Guard:
1. New:

- a) Extended platform guard with painted enamel finish to meet Code requirements.
 - b) Minimum 0.059" (1.5 mm) thick steel, or material of equivalent strength and stiffness.
 - c) Reinforced and braced to front and rear of car platform.
- D. Car Rail Guide Roller or Shoe Assemblies:
- 1. New:
 - a) Solid type to accommodate freight loading classification.
 - b) Include renewable oilless inserts.
- E. Top of Car Guardrail:
- 1. New:
 - a) Provide car top railings where fall hazard exceeds 12".
 - b) Install guardrails, necessary hardware, and toe board to meet code requirements.
- F. Car Top Control Station:
- 1. Mount to provide safe access and utilization while standing on car top.
 - 2. Operating device with Up and Down direction buttons, a Run button, an Inspection/Automatic switch and Emergency Stop switch.
 - 3. Operating device provides an audible and visible indicator that fire recall has been initiated.
 - 4. Fix station to the car crosshead or provide portable station provided the extension cord and housing is permanently attached to the car crosshead.
 - 5. The car will be operated by constant pressure on the appropriate directional button and the Run button simultaneously.
 - 6. Normal operating devices will be inoperative while this device is in use.
- G. Car Top Emergency Audible Signal:
- 1. Provide on top of each elevator.
 - 2. Activation of Alarm Button or Emergency Stop switch will cause Emergency Audible Signal.
 - 3. Provide auxiliary power supply to provide 1-hr. power in the event of loss of normal power.
- H. Work Light and Duplex Plug Receptacle:
- 1. Work light on top and bottom of car.
 - 2. Car top light mounted to provide illumination of all car top equipment.
 - 3. GFCI protected duplex outlet. One (1) at top and one (1) at bottom of car.
 - 4. Include on/off switch and lamp guard.
- I. Car Door Closed Detection:
- 1. SIL rated device to detect closed position of car doors.
 - 2. Design and operation to comply with ASME A17.1 2019 or later edition.
- J. Car Door Interlock:
- 1. Mechanical door interlock device to prevent:
 - a) Machine operation or power door opening outside of door zone.
 - b) Manual door opening from inside car outside of door zone.

2. Design and operation to comply with ASME A17.1 2019 or later edition.
- K. Car Door/Gate Electrical Contact:
1. New:
 - a) Prohibit car operation unless car door or gate is closed.
- L. Restricted Opening Device:
1. New:
 - a) Restrict opening of car doors to Code required limit outside unlocking zone.
 - b) Adjust for smooth and quiet operation with operating noise undetectable from inside any car or outside of the hoistway.
 - c) Plunger type restrictors not acceptable.
 - d) Mechanical angle to prevent door opening is acceptable.
- M. Power Freight Gate Operator:
1. New:
 - a) Power gate operation.
 - b) Provide means to open gate from inside of car in the event of power failure.
 - c) Closing Speed: Minimum of 1.6 fps; maximum of 2.0 fps.
- N. Bi-Parting Freight Car Gate:
1. New:
 - a) Power operated, single section.
 - b) Minimum 6'-0" high.
 - c) Minimum 12-gauge welded wire mesh welded into frame angles.
- O. Bi-parting Freight Door and Gate Reopening Device:
1. New:
 - a) Black, fully enclosed door reopening device.
 - b) Full screen infrared matrix or multiple beams extending vertically inside and outside of each car gate guide track.
 - c) Minimum detection zone height of 8'-0" above finished floor.
- P. Car Operating Panel:
1. New:
 - a) Two (2) car operating panels for Cars B-6, B-7 and one (1) for Car B-13.
 - b) Mounted in stationary return panel(s) with separate hinged faceplate.
 - c) Metal box containing operating fixtures mounted behind the car return panel.
 - 1) Vandal resistant.
 - d) Provide Exposed Pushbuttons to Initiate:
 - 1) Car call registration.
 - 2) Alarm.
 - 3) Door open.

- 4) Door close.
- 5) Emergency push-to-call communication.
- e) Pushbuttons:
 - 1) Provide minimum 3/4" diameter raised floor pushbuttons which illuminate to indicate call registration.
 - 2) Brushed stainless buttons with illuminated LED halo.
 - 3) Locate operating controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call button and alarm button.
 - 4) Identify buttons with cast tactile symbols recessed flush mounted.
- f) Locked Firefighters' Emergency Operation Panel:
 - 1) Openable by the same key which operates the Fire Operation switch.
 - 2) Including the following features:
 - (a) Phase II fire access switch.
 - (b) Firefighters' visual indication.
 - (c) Call cancel button.
 - (d) Stop switch, manually operated.
 - (e) Door open button.
 - (f) Door close button.
 - (g) Floors served signage.
- g) Service Compartment:
 - 1) Provide lockable service compartment with recessed flush door.
 - 2) Door material and finish to match car return panel or car operating panel faceplate.
 - 3) Include the following controls in lockable service cabinet with function and operating positions identified by permanent signage or engraved legend:
 - (a) Access switch.
 - (b) Light switch.
 - (c) Four position exhaust blower switch.
 - (d) Independent service switch.
 - (e) Constant pressure test button for battery pack emergency lighting.
 - (f) 120-volt, AC, GFCI protected electrical convenience duplex outlet.
 - (g) Card reader override switch.
 - (h) Switch to select either floor voice annunciation, floor passing tone, or chime.
 - (i) Keyed stop switch.
- h) Provide black paint filled (except as noted), engraved, or approved etched signage as follows with approved size and font:
 - 1) Phase II firefighters' operating instructions on inside face of firefighters' compartment door.
 - 2) Engrave filled red firefighters' operation on outside face of compartment door.
 - 3) Building identification car number on main and auxiliary car operating panel(s).

- 4) "No Smoking" on main and auxiliary car operating panel(s).
- 5) Car capacity in pounds on all car operating panel.
- 6) Loading classification and description on all car operating panels.

Q. In-Car Card/Proximity Reader Security Provisions:

1. New: Provide Provisions

4.7 COMMUNICATION

A. Car Communication System:

1. Hands free two-way communication instrument in car:
 - a) Mounted behind car operating panel.
 - b) Button on car operating panel to initiate two-way communication from Car.
 - c) Match car operating panel pushbutton design.
 - d) System includes:
 - (a) Auto dialer.
 - (b) Speaker.
 - (c) Microphone.
 - (d) Adjacent light jewel that illuminates and flashes when call is acknowledged.
 - (e) Call button tactile symbol, engraved signage, and Tactile marking adjacent to button mounted integral with car front return panel.
 - (f) Rechargeable back-up battery and charging system.
 - (g) Wiring and connections between all devices inside the car and the elevator controller.
2. Communication for Deaf, Hard of Hearing and Speech Impaired:
 - a) Device inside car to allow text communication between passengers in the car and Authorized and Emergency Elevator Personnel. System includes:
 - 1) Video screen inside car to display text messages.
 - 2) Separate pushbuttons labeled "yes" and "no".
 - (a) Locate on the same car operating panel as the call button for the hands free communication device.
 - b) Dedicated emergency communications video camera inside the elevator.
 - 1) Mount to capture view of all passengers in the cab.
 - c) Device is located on the same car operating panel as the phone pushbutton.
 - d) Provide shielded twisted pair wiring to communicate to machine room or equipment space network box.
3. Remote Video Monitoring System:
 - a) Dedicated video camera inside elevator car to allow Authorized Personnel to remotely observe passengers at any location on the car floor.
 - b) Includes all wiring, conduit, fiber optic strands, encoders, routers, internet connections, cloud-based services required to allow Authorized Personnel to access video signal.

4.8 CAR ENCLOSURE AND INTERIOR FINISHES

- A. Unless specifically identified as "Retain," "Reuse," or "Refurbish," provide new equipment. Contractor may, with Consultant approval, provide new equipment in lieu of refurbishing existing. See Section 00 80 00, Supplemental Conditions.
- B. Car Enclosure (Cab Shell):
 - 1. Retain.
- C. Wood Bumper Rails:
 - 1. New:
 - a) Two rows of 2" x 12" oak or maple bumpers mounted on side walls (and rear of B-13) of car enclosure.
 - b) Locate bottom rail at floor level and top rail at 36" above the car floor.
 - c) Bolt rails through car walls with bolt and captive nuts on exterior of wall panel sections on 18" centers.
 - d) Finish both upper and lower top edges with a 45-degree chamfered edge to eliminate collection of trash.
 - e) Return rail ends to car walls.
- D. Lighting:
 - 1. New:
 - a) LED fixtures with all required wiring connections and controls.
 - b) Coordinate with emergency lighting requirements.
 - c) Provide emergency lighting integral with portion of normal car lighting system.
 - d) Recessed LED down lights with on/off switch in car operating panel. Recess mount fixture flush with inside surface of car top. Provide steel guard on car top over fixture.
- E. Ventilation:
 - 1. New:
 - a) Three-speed type AA exhaust blower.
 - b) Mount to car canopy on isolated rubber grommets.
 - c) Meet noise requirements specified herein.
- F. Car Finish Floor Covering:
 - 1. New:
 - a) Freight Elevator, 1/4" steel diamond plate over sub-floor.

4.9 HALL CONTROLS

- A. Automatic Pushbutton Stations:
 - 1. Surface mounted riser adjacent to hoistway entrances.
 - 2. Single call button and "in use" light which illuminates when hall call is registered. Pushbutton design shall match car operating panel pushbuttons.
 - 3. Vandal-resistant pushbutton and LED light assemblies.
 - 4. Enlarged faceplate to cover Existing wall block out.

5. Approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency as part of faceplate.
 6. Provide any cutting and patching required.
- B. Freight Door Control Stations:
1. New:
 - a) Vandal resistant "door open," "door close," and "stop" pushbuttons for control of power operated vertical bi-parting doors at each landing call pushbutton fixture.
 - b) Pushbuttons integral with hall control station.
 - c) Pushbutton design to match car operating panel pushbuttons.
 - d) Provide any cutting and patching required.

4.10 CAR ARRIVAL AND TRAVEL DIRECTION SIGNALS

- A. Hall Position Indicator:
1. New:
 - a) Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 2½" high to indicate floor served and direction of car travel.
 - b) Mount integral with hall station at main egress floor.
 - c) Provide vandal resistant indicator and light assemblies.
- B. Car Direction Lantern:
1. New:
 - a) Provide flush-mounted car lantern in all car entrance columns.
 - b) Illuminate up or down LED lights and sound tone once for up and twice for down direction.
 - c) Provide advanced hall lantern notification to comply with ADA hall call notification time.
 - d) Illuminate light until the car doors start to close.
 - e) Sound level shall be adjustable from 20-80 dBA measured at 5'-0" in front of hall control station and 3'-0" off floor.
 - f) Car direction lenses shall be arrow shaped with faceplates.
 - g) Lenses shall be minimum 2½" in their smallest dimension.
 - h) Provide vandal resistant lantern and light assemblies consisting of series of dots or lines for maximum visibility.
- C. Car Position Indicator:
1. New:
 - a) Alpha-numeric digital indicator type.
 - b) Floor designations and direction arrows a minimum of 2" high to indicate floor served and direction of car travel.
 - c) Vandal resistant fixture and faceplate.
 - d) Locate in each car operating panel..
 - e) When a car leaves or passes a floor, illuminate indication representing position of car in hoistway.

- f) Illuminate proper direction arrow to indicate direction of travel.
- D. Voice Synthesizer:
 - 1. Provide electronic device with easily reprogrammable message and voice to announce car direction, floor, emergency exiting instructions, etc.

4.11 SIGNAL FIXTURE FACEPLATE FINISHES

- A. All Fixtures:
 - 1. Stainless steel satin finish.

PART 5 – EXECUTION

5.1 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Inform Owner and Consultant of any irregularities in writing prior to commencing work.
- C. Do not proceed with installation until work in place conforms to project requirements.

5.2 INSTALLATION

- A. Install all equipment as follows:
 - 1. in accordance with Contractor's instructions, referenced codes, specifications, and approved submittals.
 - 2. with clearances in accordance with referenced codes, and specifications.
 - 3. to be easily maintained and/or removed.
 - 4. to afford maximum accessibility, safety, and continuity of operation.
- B. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
 - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 - 2. Machine room equipment, and pit equipment.
 - 3. Neatly touch up damaged factory-painted surfaces with original paint color.
 - 4. Protect machine-finish surfaces against corrosion.
- C. Paint machine room and pit floors.

5.3 FIELD QUALITY CONTROL

- A. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
- B. Perform complete "Acceptance" level pre-testing as specified in the latest edition of ASME A17.2 "Guide for Inspection of Elevators, Escalators, and Moving Walks" prior to AHJ witnessed acceptance testing. Complete any adjustments, repairs, or replacements necessary to achieve code compliant operation including but not limited to:

1. Car emergency communications. Inform Owner and Consultant of any noted failures of Owner provided and maintained equipment or systems.
 2. Car buffers.
 3. Phase I and II Firefighters' Emergency Operation. Phase I initiated by smoke sensing devices.
 4. Power car door operation including door closing force, reopening device, and restricted opening.
- C. Have Code Authority acceptance inspection performed and complete corrective work.
- D. Provide access to installed equipment and elevator personnel assistance for Consultant's final observation and review requirements.

5.4 ADJUSTMENTS

- A. Static balance car to equalize pressure of guide shoes on guide rails.
- B. Verify that weights of existing or altered cars do not exceed total weights indicated on approved submittals. See Section 01 30 00, Submittals.
- C. Lubricate all equipment in accordance with Contractor's instructions.
- D. Adjust motors, power conversion units, brakes, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

5.5 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials daily.
- B. Elevator hoistways and all equipment therein shall be cleaned and left free of rust, filings, welding slag, rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt, and dust, including walls, building beams, sill ledges, and hoistway divider beams.
- C. Care shall be to not to mark, soil, or otherwise deface existing or new surfaces. Clean and restore such surfaces to their original condition.
- D. Clean down surfaces and areas which require final painting and finishing work. Cleaning includes removal of rubbish, broom cleaning of floors, removal of any loose plaster or mortar, dust, and other extraneous materials from finish surfaces, and surfaces which will remain visible after the work is complete.
- E. Paint machine room floors.
- F. Remove all loose materials and filings resulting from work.
- G. Clean machine room equipment and floor.
- H. Clean car, car enclosure, entrances, operating and signal fixtures.

5.6 FINAL COMPLIANCE REVIEW

- A. See SECTION 01 70 00 – FINAL CONTRACT COMPLIANCE REVIEW.

END OF SECTION

Additional Fees for the following emergency communication services are below:

- If customer chooses to use the TKE cellular connectivity package, TKE has included 12 months of free monitoring for two-way visual in service pricing.
 - If purchaser decides to decline the ongoing cellular service at the end of warranty period, then purchaser agrees to provide a Dataline to machine room with an ethernet switch and a code-compliant unsecured internet connection with no firewall.

SPECIFICATION SPECIFIC CLARIFICATIONS

00 80 00 – 1.15 – A – 250 sqft of storage per car. Storage must be in a dry and secure space. Storage of the material and any damages will be the owners responsibility.

01 70 00 – 1.2 – B – 1 – will cycle through a 3 day weekend with door operations. 12

24 01 – 4.2 – C – 1 – A – Submersible Pumping units to be provided.

14 24 01 - 4.4- A – 6 – standalone hoistway access.

14 24 01 – 4.10 & 4.11 – Custom hall pushbuttons and custom car and hall fixtures to be provided by TK Elevator.

14 22 03 – 4.2 – C – 1 – a – New Submersible pumping units to be provided by MEI.

EXHIBIT B

Contractor's compensation for all engineering, labor, materials, transportation, services, equipment and other work product, goods and services under this Agreement is the following.

Payment Terms and Schedule

PART 1 – GENERAL

A. Contractor's Base Compensation

ITEM 1: Modernize Passenger Elevators A1E, A-2E, A-5A, A-5B, B-8A and B-8B, Section 14 22 01 :

Dollars \$1,200,000

ITEM 2: Modernize Freight Elevators B-6, B-7 and B-13, Section 14 22 02:

Dollars \$1,180,000

ITEM 3: Related Work, Section 01 90 00:

Dollars \$720,000

ITEM 4 Total of Items 1—3:

Dollars \$3,100,000

Pursuant to Article 2 of this Agreement, the Authority shall pay Contractor those sums identified above in this Exhibit "B," which shall be invoiced by Contractor following completed delivery of the engineering labor, materials, transportation, services, equipment and other goods and services deliverable under this Agreement. Provided, however, that following completed delivery of all pre-engineering surveys, submittals and drawings under this Agreement, Authority shall pay Contractor the following sum which shall be invoiced by Contractor of \$465,000.00 (15% of total contract value "Initial Payment"). The second invoice the authority shall pay contractor \$775,000.00 (25% of total contract value "Material Payment"), for the completed onsite delivery of materials at Georgia World Congress Center. After payment of the Initial Payment and the Material Payment, the remaining balance of \$1,860,000 (the "Final Payment"), which shall be invoiced by Contractor, shall be due and payable in \$206,666.67 increments upon completion of each unit. The sum of the three payments stipulated above shall equal the total contract value of \$3,100,000.

B. Maintenance:

1. Twelve-Month Warranty Preventive Maintenance: Amount included in Total of Items 1-3 above.

Compensation for Warranty Preventive Maintenance after Twelve Months:

Passenger Elevator A-1E: \$3,241.44 /Month

Passenger Elevator A-2E \$3,241.44 /Month

Passenger Elevator A-5A: \$3,241.44 /Month

Passenger Elevator A-5B \$3,241.44 /Month

Passenger Elevator B-8A \$3,241.44 /Month

Passenger Elevator B-8B \$3,241.44 /Month

Freight Elevator B-6 \$ 3,241.44 /Month

Freight Elevator B-7 \$3,241.44 /Month

Freight Elevator B-13 \$3,241.44 /Month

NOTE: Owner reserves the right to pay warranty maintenance cost in a lump sum or monthly during period maintenance is actually performed.

C. Labor Rates for Modernization Work Not Included in Contract Scope

Authority shall pay straight time hourly labor rates below for work not included in the contract scope, and for overtime labor not in the contract scope if authorized by Authority. Unless stated otherwise in writing by Contractor and submitted with this Quotation Form, labor premium rates will be based on the following straight time hourly rates effective at the time of Quotation submittal.

Mechanic \$278/Hour

Helper/Apprentice \$n/a/Hour

Team \$494/Hour

TK Elevator's liability for breach of contract shall be limited to its proportionate share of fault and shall not exceed One Million Dollars (\$1,000,000) in total. Schedules and completion dates, and any changes thereto, shall be agreed to in writing by both parties before becoming effective, and progress of the work shall be upon reference thereto.

Prior to termination, Contractor shall be provided three (3) days written notice specifying the nature of the default and an opportunity to cure said default within said (3) day period.

TK Elevator shall have no indemnity obligation for any loss arising solely from the Authority's negligence or fault. In addition to all other Guarantees and Warranties under this Agreement and applicable law, Contractor's Guarantee/Warranty shall be for one (1) year after acceptance of work covered by this agreement by The Authority.

TK Elevator has included all tariffs and tariff-related costs in effect as of August 11, 2025. Any tariffs or tariff-related costs imposed, increased, or incurred after the date of this Agreement shall constitute a change order to be issued to the Purchaser. TK Elevator shall issue such change order to the Purchaser in an amount equal to the additional tariff or tariff-related costs actually incurred, supported by reasonable documentation or evidence from subcontractors demonstrating the cost increase.

CERTIFICATE

The undersigned hereby certifies that I hold the position of Assistant Secretary, as stated below my signature, of the Geo. L. Smith II Georgia World Congress Center Authority and that the Resolution a true and correct copy of which is attached to this Certificate was duly adopted by the Board of Governors of the Authority at and in a public meeting duly scheduled and for which all public notices required by law were given.

Dated: January 27, 2026

Alisha King, Assistant Secretary

{Authority Seal}